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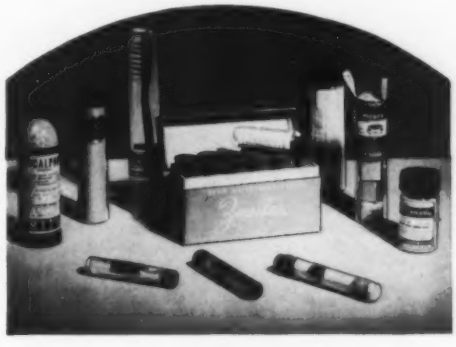
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OVER 2000 years ago, Alexander the Great wept because he had no more worlds to conquer.

But times have changed and even Alexander — if he were with us today — could dry his tears and find many fields for his tremendous energy other than adding "geography" to the Greek Empire.

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Perfume and cosmetic manufacturers have also emerged from the "homespun" days. They are buying better perfume oils *complete and ready to use.*

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THERE is one way to maintain an established, high standard of quality and that is by constant vigilance. With FRITZSCHE products this commences at the very source of our crude raw materials. At every stage in their handling, from the time they arrive at our plant until they leave it, packaged and sealed against tampering, these materials are subjected to the most exacting treatment that technical skill, experienced hands and modern facilities can provide. From first to last, unremitting vigilance protects and guarantees that standard for which these products have been distinguished for years and years.

It is when sales success hinges upon quality that the perfume manufacturer who has taken the wise and logical precaution of using FRITZSCHE ingredients most appreciates the worth of such vigilance.

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ANIMAL SCENTS

Artificial



CASTOREUM ARTIFICIAL F. B.

The great difference between this synthetic material and the natural castoreum obtained from beavers is one of cost. In actual appearance, odor and strength, it varies little from the genuine. For most practical purposes, CASTOREUM ARTIFICIAL F. B. should be used in the form of a tincture made in proportions of 2 ounces of the Artificial to 1 gallon of alcohol. In some formulae it can be used to replace the genuine castoreum completely; in others, most satisfactory results are obtained by combining it with the natural product. Its characteristic odor and fixation qualities render it especially adaptable to heavy perfume compounds of the Oriental type. Extremely low priced and effective, CASTOREUM ARTIFICIAL F. B. has much to recommend it to the producer of fine perfumes.



MUSK TONQUIN ARTIFICIAL F. B.

Tonquin Musk is the most powerful and tenacious of the four principal animal fixatives. In our new MUSK TONQUIN ARTIFICIAL F. B. we have successfully embodied those outstanding characteristics for which the natural musk is most valued —its subtle but penetrating and persistent odor, its remarkable fortifying effectiveness and its power of diffusion. To lifeless perfumes it imparts the same stimulating "lift" of the genuine product. MUSK TONQUIN ARTIFICIAL F. B. can best be used as an alcoholic tincture made by dissolving 4 ounces of the Artificial in 1 gallon of alcohol and ageing to proper maturity. Such tincture, substituted for natural Tonquin Musk in the manufacture of certain soaps, will effect savings in raw material costs without sacrifice of odor or tenacity.

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CIVET ARTIFICIAL F. B.

There have been offered, from time to time, numerous substitutes for natural civet. Careful examination and application of many of these have failed to reveal a synthetic capable of imparting the characteristic softness of odor for which the genuine product is noted. This has lead us to the development of CIVET ARTIFICIAL F. B. —a *successful* endeavor to overcome this common deficiency. Imparting the odor character typical of natural civet, our Artificial resembles it closely in color and consistency, is much stronger and possesses a decided advantage in its solubility. In the form of alcoholic tincture, properly aged, it can be handled in fine perfume formulae in the same manner as Civet Absolute. Exacting perfumers will not be long in recognizing this new material for its true worth.



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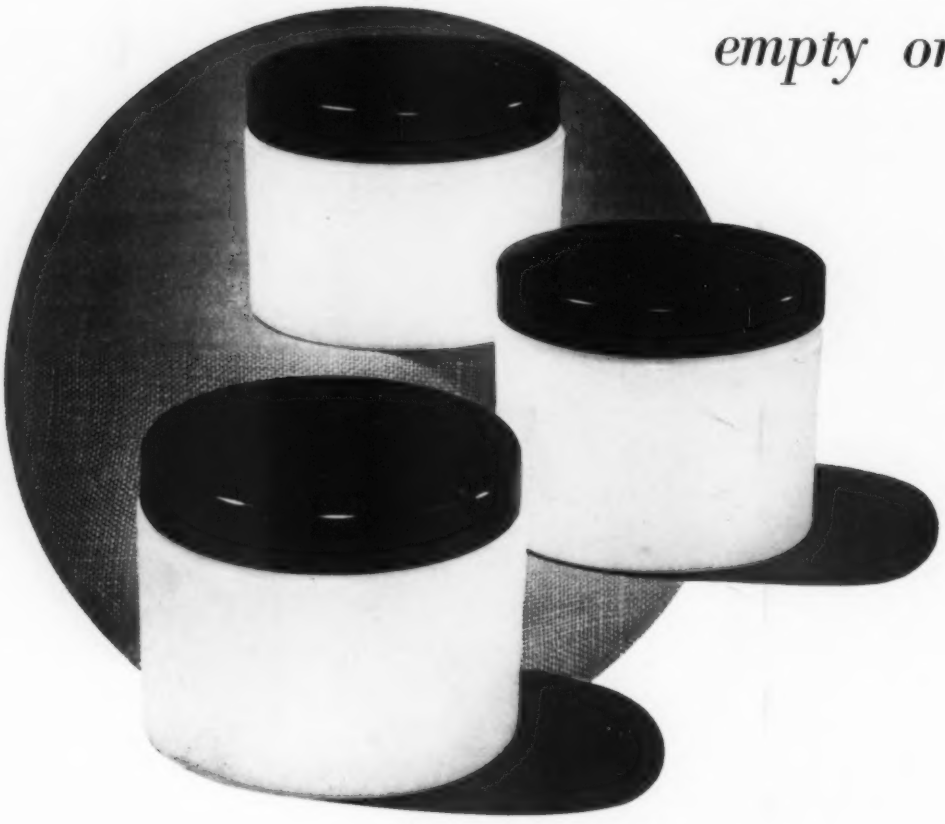
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HELIOCRETE

As far back as 50 A. D. Heliotrope was a favorite. Dioskorides, a Greek doctor, writes that the name Heliotrope was given the plants because the leaves turn to the sun. There are some 220 varieties, the most common of which are *Heliotropium Peruvianum* L, the vanilla Heliotrope, and *Heliotropium corymbosum* Ruiz de Pavon.

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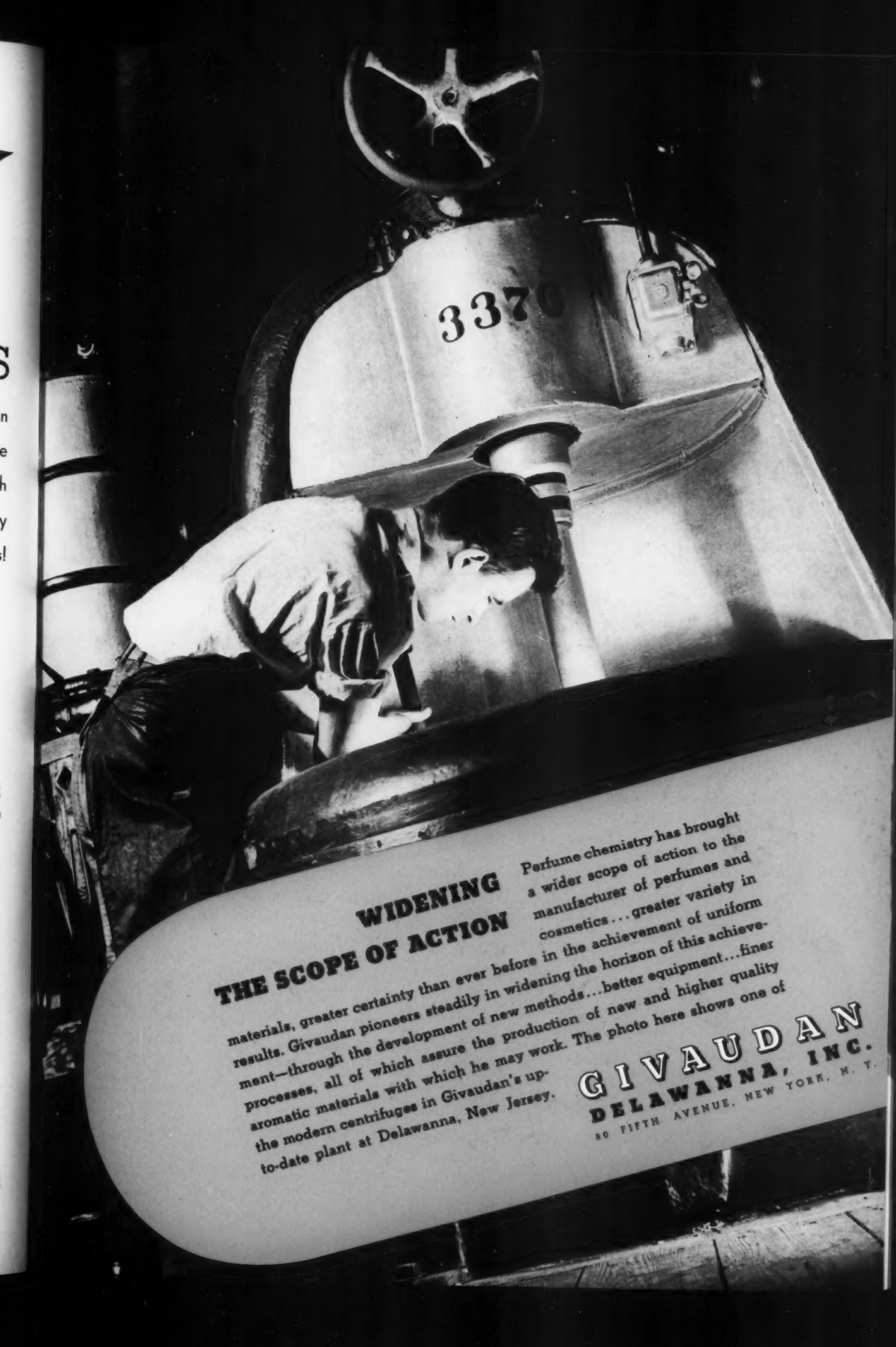
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BIBLIOGRAPHY
of
The Scientific Evolution of Vitamin F

1926

1. Boissevain, C. H.—*The Action of Unsaturated Fatty Acids on Tubercle Bacilli.*

Boissevain reports experiments showing the effect of unsaturated fatty acids on the virulence of tubercle bacilli in vitro. (Compare with the work of Larsen on the ricinoleates) Linoleic and linolenic acids were among the most effective.

(*American Review of Tuberculosis, volume 13, pages 84-89, 1926.*)

1927

2. Evans, H. M., and Burr, G. O.—*New Dietary Deficiency with Highly Purified Diets.*

Diets freed from fat but containing adequate amounts of vitamins A, B, D, and E proved incapable of maintaining normal growth and reproduction in animals. The authors conclude that such purified diets demand either an extraordinary and unique amount of some one of the known vitamins or else another and unknown member (F or H) of the vitamin class.

(*Proceedings of the Society of Experimental Biology and Medicine, volume 25, pages 41-48, 1927.*)

3. Evans, H. M., and Burr, G. O.—*New Dietary Deficiency with Highly Purified Diets; The Biological Effect of Fat in the Diet.*

Fat improved growth and ovulation in a study of animals fed a fat free diet. When the fats were separated into non-saponifiable matter, glycerol and fatty acids, the improvement was attributed to the fatty acid fraction. The authors considered the favorable substance in fat as representing possibly a new vitamin (F), which, unlike vitamins A, D, and E, is not concentrated in the non-saponifiable fraction.

(*Proceedings of the Society of Experimental Biology and Medicine, volume 25, pages 390-397, 1927.*)

1928

4. Evans, H. M., and Lepkovsky, S.—*Sparing Action of Fat on the Anti-Neuritic Vitamin.*

If fat is added to a fat free diet, the amount of anti-neuritic vitamin necessary to establish any definite level of growth or frequency of ovulation is always less than is required when fat is absent. The action of vitamins A, D, and E was excluded, nor was there any anti-neuritic vitamin in the fats themselves. The authors conclude that the action is due to the biological effect of fats previously emphasized by Evans and Burr; therefore, due to vitamin F.

(*Science, volume 68, page 298, 1928.*)

5. Archard, C., Grigaut, A., LeBlanc, A., and David, M.—*L'Equilibre Lipoïdique du Sérum Sanguin dans les Maladies Aigües (The Lipoid Equilibrium of the Blood Serum in Acute Diseases).*

Archard and his associates studied the lipoids of the blood serum, including the iodine number (unsaturated fats) in various diseases. The iodine number is definitely lowered in the acute stage of disease, beginning to rise when convalescence begins and gradually approaching normal as the patient recovers. In fatal cases, the iodine number showed no increase. They concluded that the diminution in the iodine number, or in the unsaturated fats, corresponds with a diminution of the defensive powers of the organism against invasion. (Compare Boissevain and Larsen).

(*Journal de Physiologie et de Pathologie Generale, volume 26, page 415, 1928*).

1929

6. McAmis, A. J., Anderson, W. E., Mendel, L. B.—*Growth of Rats on Fat Free Diets.*

During the life of animals grown on fat free diets, the authors noted a poor condition of the fur and bloody urine. Other symptoms suggestive of vitamin deficiency were observed. The authors concluded that, whether the apparent beneficial effects of a small amount of fat is due to its content of vitamin A or other vitamins, or to its action as a vehicle for the fat soluble vitamins, or whether fat *per se is* essential, had not been conclusively demonstrated by their own experiments.

(*Journal of Biological Chemistry, volume 82, page 247, 1929.*)

7. Burr, G. O., and Burr, M. M.—*A New Deficiency Disease Produced by the Rigid Exclusion of Fat From the Diet.*

The first minute description of a fat deficiency syndrome appears in this contribution. Fat deficiency makes for retarded growth, more marked in the male than in the female animal. An abnormal scaly condition of the skin is developed. Hemorrhagic spots appear throughout the entire length of the tail and an actual necrosis results. The hind feet become red and swollen. The hair is filled with dandruff and a tendency for its loss is apparent. Sores appear in the skin, especially the skin of the face. The urinary tract and kidney is extensively involved and undoubtedly is an important factor in the death of the animal.

The presence of fatty acids in the diet changed the entire economy of the animals. If the effect be not due to ordinary fatty acids, the authors suggest that a new substance of the nature of an ether soluble organic acid, which could be classed as a vitamin, was responsible for this characteristic dietary deficiency (vitamin F.)

(*Journal of Biological Chemistry, volume 82, pages 345-367, 1929.*)

8. Evans, H. M., and Lepkovsky, S.—*Sparing Action of Fat on the Anti-Neuritic Vitamin (B).*

The authors refer to their work of 1928 which is amplified in this report. They conclude that, in the absence of anti-neuritic vitamin B, it takes relatively more fat to bring into evidence the sparing action of fat. They defend the view that fats as such undoubtedly exert an important function in the metabolism of the animal other than supplying energy.

(*Journal of Biological Chemistry, volume 83, pages 269-287, 1929.*)

9. Brown, J. B.—*The Occurrence of a New Highly Unsaturated Fatty Acid in the Lipids of the Brain.*

Brown reports the finding of unsaturated lipids in beef brain.

(*Journal of Biological Chemistry, volume 83, pages 783-791, 1929.*)

10. Brown, J. B., and Rawlins, A. L.—*The Effect of Feeding Whale Oil on the Depot Fat of the White Rat.*

An equilibrium between the food fat and the depot fat was established in between four to six weeks on a given diet. The characteristic wholly unsaturated fatty acids of whale oil were apparently deposited as such.

(*Proceedings of the Society of Experimental Biology and Medicine, volume 26, page 704, 1929.*)

11. Taylor, T. C., and Iddles, H. A.—*Separation of the Amyloses in Some Common Starches.*

Corn starch contained 1.18 per cent of fatty material with iodine numbers of from 90.6 to 91.2 in different samples. Investigators using starch in a basic diet, in the belief that it is fat free, might readily overlook this residuum of highly unsaturated fats, against which error Taylor and Iddles caution.

(*Industrial and Engineering Chemistry, volume 18, pages 713-717, 1929.*)

1930

12. Sinclair, R. G.—*The Influence of Diet on the Amount and Composition of the Phospholipid Fatty Acids in Various Tissues in the Cat.*

Sinclair observed that the degree of unsaturation of the fatty acids was definitely higher in the liver, heart, kidney, smooth and skeletal muscles, and intestinal mucosa in cats fed with beef kidney than in cats fed with beef muscle.

(*Journal of Biological Chemistry, volume 86, pages 579-586, 1930.*)

13. Burr, G. O., and Burr, M. M.—*On the Nature and Rôle of the Fatty Acids Essential in Nutrition.*

The most sensitive test of fat deficiency disease is scaliness of the feet. Dandruff is also a reliable indication of the disease. Still greater emphasis is placed on the condition of the kidneys, which are grossly abnormal and show a degeneration, unlike that ascribed to vitamin A deficiency. The kidneys disorder due to fat deficiency disease is neither cured nor prevented by increased amounts of the A and D fraction from cod liver oil, but is cured or prevented by the addition of fatty acid not containing vitamin A.

Disturbance of the pituitary is evidenced by the abnormal consumption of water that fat deficient rats display. Vitamin E was without effect in the prevention or cure of the fat deficiency syndrome, nor was regular ovulation induced in female animals by the addition of vitamin E, as was the case with curative oils.

Infertility arising from fat deficiency is not corrected with vitamin E. The fat deficiency syndrome in its entirety was not cured by saturated fatty acids, including stearic, palmitic, myristic, lauric or lower members of the aliphatic series; but it was cured by linoleic acid, either alone or when present in olive oil, lard, corn oil, poppy seed oil, or linseed oil.

The evidence seemed to point to the great effectiveness of linoleic acid, which the authors consider an indispensable essential fatty acid for nutrition. This is the first evidence that suggests the nature of the vitamin F material hinted at in all previous work.

(*Journal of Biological Chemistry, volume 86, pages 587-621, 1930.*)

14. Brown, J. B., and Ault, J. C.—*Comparison of the Highly Unsaturated Acids of Beef, Hog, and Sheep Brains.*

A method is described for the isolation of the fatty acids of the brain. This method may become useful for future work on vitamin F.

(*Journal of Biological Chemistry, volume 89, pages 167-171, 1930.*)

15. Platonov, G.—*The Influence of Unsaturated Fatty Acids on the Virulence of Turbercle Bacilli.*

Platonov points to recent investigations as having proved the extreme biological importance of lipoids, especially those of the unsaturated fatty acid type. The value of these substances "as nourishment" for the tuberculous patient is thought by Platonov to have been clearly demonstrated during the World War, when the spread of tuberculosis and the peculiar character of the disease at that time furnished proof of diminished resistance brought about by hunger and especially by an insufficiency of fats.

Platonov refers to the work of Goldenberg and Steflso (Russian reference not available) whose determination of the iodine value of various tissues indicated a decrease of the content of unsaturated fatty acid in the organs of the tuberculous and the underfed. Goldenberg and Steflso regard this as the reason for an increased susceptibility for tuberculosis.

Platonov seems to have demonstrated an increased immunity to otherwise lethal doses of tubercle bacilli in guinea pigs by the effect of various oils containing unsaturated fatty acids on tubercle bacilli.

Clinically, the author indicates that his experience is such as to support the conviction that the tubercle bacillus does not easily attack tissues in the human in which unsaturated fatty acids are richly contained. He indicates that the high content of oleins in horse serum and the presence in it of highly unsaturated linoleic acid fits admirably well with the known immunity of the horse to tuberculosis. Platonov indicates that the unsaturated fatty acids should serve as basis for the dietetic therapy of tuberculosis.

(*American Review of Tuberculosis, volume 21, pages 362,369, 1930.*)

16. Mueller, P.—*Ueber die Ungesättiglen Fettsäuren Menschlischen Lebers (Unsaturated Fatty Acids of the Human Liver).*

In human livers, Mueller found that the quantity of unsaturated fatty acids did not increase proportionately with the total fat content of the liver, but remained essentially the same for the total liver substance.

(*Archiv fur Experimentelle Pathologie und Pharmakologie, volume 147, pages 219-235; and 240, 1930.*)

17. Sinclair, R. G.—*Some observations on the Growth of Rats on Fat Free and Fat Containing Diets.*

Sinclair reports that rats fed on the fat free diet similar to that used by Burr and Burr developed a scaly condition of the tail without exception and identical with that described by Burr and Burr, if they were kept in cages with a false bottom. The matter of access to feeding on feces is developed.

Cod liver oil did not protect against scaliness of the tail, even when used up to 10 per cent by weight of the diet.

(*Proceedings of the Society for Experimental Biology and Medicine, volume 27, pages 1059-1062, 1930.*)

1931

18. Graham, C. E., and Griffith, A. H.—*Observations on the Nutritive Value of Certain Fats.*

These investigators corroborated the findings of the Burrs. The scaliness that developed on the feet was not prevented by doubling the yeast intake nor by an active extract of rice polishings, nor by an active liver extract. The condition of the tail was made worse by increasing the cod liver oil. The symptoms were prevented by wheat germ oil, lard or whole liver, wheat germ oil being the most effective, and lard the least effective.

Graham and Griffith required additional information before accepting the Burr fat deficiency signs as representing a deficiency in some food factor or as a toxic effect due to the cod liver oil used.

(*Proceedings of the Society for Experimental Biology and Medicine, volume 28, pages 756-761, 1931.*)

19. Funk, Casimir, Caspe, S., Caspe, H.—*A New Pathological Condition of Probable Dietetic Origin in Rats.*

These authors report a syndrome analogous to that described by Burr which they could not prevent by the addition of lard or cod liver oil or linoleic acid to the daily ration. The error in this investigation is discussed subsequently by Burr.

(*Proceedings of the Society for Experimental Biology and Medicine, volume 28, pages 816-818, 1931.*)

20. Sueyoshi, Y., and Furokubo, T.—*Ueber die Fettsäuren des Eigelblecithins (On the Unsaturated Fatty Acids in Egg Yolk Lecithin).*

Egg yolk lecithin was found to contain 73.2 per cent. of oleic acid, 5.1 per cent. of clupadonic acid and 2.1 per cent. of linoleic acid. Previous to this investigation clupadonic acid had been found only in fish oils.

(*Journal of Biochemistry, volume 13, pages 177-183, 1931.*)

21. Hume, E. M., and Smith, H. H.—*Relation of Fat Free Diet to the Scaly Tail Condition in Rats Described by Burr and Burr.*

These authors observed the development of the tail condition in rats which received fats in the diet as well as those that did not receive fats. Chick, Roscoe and Aykroyd observe a similar scaly condition in their rats at the Lister Institute, when the animals were housed in cages with coarse wire flooring and diets supplemented by yeast derivatives, rather than whole yeast, as the source of the B vitamins.

(*Biochemical Journal, volume 25, pages 300-306, 1931.*)

22. Brown, J. B.—*Content and Nature of the Highly Unsaturated Fatty Acids of the Human Brain.*

Fresh and preserved specimens of human brain showed unsaturated fatty acid content not essentially different from that in the various animal brains examined.

(*Journal of Biological Chemistry, volume 92, pages L X X XVIII-L X X XIX, 1931.*)

23. Klenke, E., and v. Schoenebeck, O.—*Ueber die hochungesättigten Fettsäuren des Phosphatide aus verschiedenen Organen (Highly unsaturated Fatty Acids from the Phosphatides in Various Organs).*

This study corroborates the findings many times elsewhere reported that unsaturated fatty acids occur in phosphatides of many animal organs.

(*Zeitschrift fur Physiologische Chemie, volume 154, pages 191-192, 1931.*)

24. Cornbleet, T.—*Use of Maize Oil (Unsaturated Fatty Acids in the Treatment of Eczema.)*

Cornbleet notes that over a period of four and a half years a group of eighty-seven patients with chronic eczema responded to treatment with maize oil given by mouth.

The eczema in the cases studied was the condition referred to as allergic eczema, exudative and dietetic eczema, Besnier's prurigo or generalized neurodermatitis.

All of the patients were over five years of age, most of them adolescents and young adults. All of them had been treated for eczema for several successive years and many since infancy. The use of the oil was not begun until it was established that the patients did not recover easily on any standard therapy.

The first notable improvement was a lightening of the color of the skin. Then the thickened parts became thinner and more supple. Itching was sometimes relieved early. The face was usually the first to improve, the hands and the feet the last.

A few of the patients had asthma which was improved as well as the eczema. Cornbleet refers to the findings of Burr and of Hansen who describes the action of the oil in eczema as being due probably to its high content of unsaturated fatty acids.

(*Archives of Dermatology and Syphilology, volume 31, pages 224-226, 1931.*)

25. Maronne, P. A.—*Contribution à l'Etude du Metabolisme Normal et Pathologique des Graisses (A Contribution to the Study of the Normal and Pathologic Metabolism of the Fats).*

Maronne summarizes the experiences of French investigators as having shown that the unsaturated fatty acids are more advantageous to the development of the organism than are the saturated fatty acids. He ascribes the protective function of fats in the subcutaneous tissue to their degree of unsaturation. He points out that, whereas the liver plays an important part in the metabolism and fixation of fats in the organism, recent researches indicate that the lungs, the spleen and the subcutaneous tissue also have a part in this metabolism.

The author opines that obesity is due chiefly to the inability to desaturate the fats assimilated in order that they may be utilized by the organism. He suggests that in the treatment of obesity saturated fats be replaced with unsaturated oils.

(*Paris, Thesis.*)

1932

26. Gregory, E., and Drummond, J. C.—*A Study of Fat Metabolism with Special Reference to Nutrition on Diets Devoid of Fat.*

These authors report experiments in which a poor condition of the fur and a scaly tail developed on fat free diets. The symptoms were not relieved by the addition of fats containing unsaturated fatty acids but were relieved by the intake of vitamin B.

Their analysis showed that linoleic acid deposited in the adipose tissue of the body is probably derived from the food.

(*Zeitschrift fur Vitaminforschung, volume 1, pages 257-284, 1932.*)

27. Hotta, S.—*Die Bedeutung der Hochungesättigen Fettsäuren in den Organen (The Significance of the Highly Unsaturated Fatty Acids in the Organism).*

The administration of thyroxin increases the oxidation of the fatty acids in the body, but there is no formation of the highly unsaturated fatty acids.

Less highly unsaturated fatty acids are more easily metabolized than are highly unsaturated fatty acids.

(*Tohoku Journal of Experimental Medicine, volume 20, pages 65-78, 1932.*)

28. Roche, A., Roche, J.—*Sur les Accidents Cutanés Attribués à la Carence en Lipide chez le Rat (Cutaneous Eruptions Attributed to Deficiency of Lipid in the Rat).*

In two types of diet containing butter fat, rats developed ulceration of the paws and a necrosis of the tail, even when yeast extract was added to the diet, but did not develop these symptoms if fresh yeast was given instead.

(*Comptes Rendus de la Societe Biologique, volume 109, pages 463-464, 1932.*)

29. Sinclair, R. G.—*The Relationship Between the Amount of Fat Ingested and the Degree of Unsaturation of the Phospholipids and the Neutral Fat in the Tissues of the Rat.*

Continuing his experiments on the effective fat in the diet, Sinclair suggests that the decline and death of rats on a fat free diet as reported by Burr and Burr may be related to the drop in the degree of unsaturation of the phospholipids below a certain level which is essential for their function.

(*Journal of Biological Chemistry, volume 96, pages 103-125, 1932.*)

30. Burr, G. O., Burr, M. M., and Miller, E. S.—*On the Fatty Acids Essential in Nutrition.*

Positive results in the cure of the deficiency disease are marked by renewed growth in weight and length, and by a clearing of the skin and an improvement of the hair coat. Linoleic acid was very effective in curing the deficiency disease as was linolenic acid, both in the form of methyl esters.

Oleic acid was found ineffective. Butter gave negative results. Tung oil had very feeble curative effects.

(*Journal of Biological Chemistry, volume 97, pages 1-9, 1932.*)

31. Sinclair, R. G.—*Relationship Between Degree of Unsaturation and Composition of Lipids in Animal Tissues.*

Continuing this type of investigation, Sinclair shows that the amount and kind of fat in the diet exerts a very pronounced and characteristic influence on the degree of unsaturation of both the phospholipids and the neutral fat in the tissues of the body.

(*Journal of Biological Chemistry, volume 97, pages X X XIV-X X XV, 1932.*)

32. Eckstein, H. C.—*Highly Unsaturated Fatty Acids in Butter.*

Eckstein demonstrated the presence of acids in butter fat, more highly unsaturated than oleic, his calculation showing about 0.25 per cent. of linoleic acid.

(*Journal of Biological Chemistry, volume 97, pages X X XV-X X VVI, 1932.*)

33. Burr, G. O., and Beber, A. J.—*A Study of the Gas Exchange of Rats Suffering from a Deficiency of Unsaturated Fatty Acids.*

When rats are fat starved but receiving other foods, the respiratory quotient remains above 1.00. When they are completely starved, the quotient drops readily. Rats that have been cured of the fat starved condition show a normal daily metabolic course.

(*Journal of Biological Chemistry, volume 97, pages X X XVI-X X XVII, 1932.*)

34. Evans, H. M., and Lepkovsky, S.—*Vital Need of the Blood for Certain Unsaturated Fatty Acids.*

Comparison of the iodine numbers of the various methyl esters employed to correct fat deficiency disease is not a criterion for the content of curative fatty acids. Thus, rats fed a fat free diet have body fats with more unsaturated fatty acids than rats at the time of weaning, yet they possess smaller amounts of the curative unsaturated fatty acids.

(*Journal of Biological Chemistry, volume 99, pages 231-234, 1932.*)

35. Evans, H. M., and Lepkovsky, S.—*The Sparing Action of Fat on Vitamin B.*

In a study of the sparing effect of various glycerides of oleic acid on vitamin B shows that commercial oleic acids gave decidedly inferior results to the glycerides of purified oleic acid.

(*Journal of Biological Chemistry, volume 99, pages 235-240, 1932.*)

36. Berend, N.—*Ueber die Rolle der Stark Ungesättigten Fettsäuren im Organismus (The Röle of Highly Unsaturated Fatty Acids in the Organism).*

In experiments on dogs fasting produced the reduction in the unsaturated fatty acids of the blood. In pathological lipemia such as occurs in diabetic dogs after the removal of the pancreas, the total fats of the blood are increased, but the unsaturated fatty acids are decreased, so that the percentage of unsaturated fatty acids to total fats is much lower than normal. Large doses of insulin raise this percentage to normal.

(*Biochemische Zeitschrift, volume 246, pages 117-123, 1932.*)

1933

37. Hansen, Arild E.—*Study of Iodine Number of Serum Fatty Acids in Infantile Eczema.*

In ten cases of eczema in sixteen normal infants of similar age, the average iodine number of the serum fatty acids in the eczema group was considerably lower than the average iodine number in the control group. This indicates that the serum fatty acids contain less unsaturates in infantile eczema than are present in the blood of normal control infants.

(Proceedings of the Society for Experimental Biology and Medicine, volume 30, pages 1198-1199, 1933.)

38. Hansen, Arild E., and Burr, G. O.—*Studies of Iodine Absorption of Serum in Rats Fed on Fat Free Diets.*

Because of the apparent necessity for unsaturated fats in the diet, the comparison of the iodine absorption of the serum lipids of control rats with that of animals on fat free diets was studied, and found to be distinct.

The highest value found in fat free animals did not reach the lowest value found in control groups. The results were considered particularly significant since the diet of the controls was comparatively low in fat made up largely from milk.

(Proceedings of the Society for Experimental Biology and Medicine, volume 30, pages 1200-1201, 1933.)

39. Hansen, A. E.—*Serum Lipid Changes and Therapeutic Effects of Various Oils in Infantile Eczema.*

Oils rich in unsaturated fats gave good clinical results in two infants suffering with severe eczema. Twelve additional cases treated in like manner showed a similar response.

The same diet and the same local care of the skin were observed in all cases. Four cases were studied in respect to the iodine number of the serum fatty acids. The control in this group showed a steady decline but the cases receiving corn oil and particularly linseed oil showed steady and unquestionably marked gain as the eczema improved.

(Proceedings of the Society for Experimental Biology and Medicine, volume 31, pages 160-161, 1933.)

40. Burr, G. O., and Brown, W. R.—*On the Fatty Acids Essential in Nutrition.*

In this contribution Burr and Brown review the work of other investigators who reported scaly skin and necrotic tails not associated with fat deficiency and not curable by the administration of suitable fats.

Funk and his associates did not use an adequate amount of vitamin B. The animals of Roche and Roche were so deficient as to have weighed only from 80 to 100 grams after twelve weeks. Hume and Smith admit that the supply of B_1 and B_2 was insufficient for good growth nor did their animals always receive sufficient vitamin A as bladderstone developed in some instances. Gregory and Drummond used an inadequate yeast extract, obviously deficient in one or more of the water soluble vitamins.

The authors fully answer all of the causes for conflict in the partial corroboration of their findings by other investigators. They point out that the fat deficiency disease is characterized by a late failure in growth after an early period of rapid growth in the presence of excess growth factors. The growth failure is accompanied by a high percentage of kidney lesions, abnormal gas exchange and abnormal water consumption.

Whereas necrosis of the tail and scaly skin can result from numerous dietary conditions, it is neither necessary nor justifiable to assume that these diverse causes work through a common factor such as abnormal skin lipids which they believed responsible for the scaliness in their rats.

(Proceedings of the Society for Experimental Biology and Medicine, volume 30, pages 1349-1352, 1933.)

41. Rof, J., and Thurnherr, A.—*Ueber das Verhalten der Ungesättigten Fettsäuren bei Experimenteller Nierenschädigung und bei Sauerstoffmangel (The Condition of the Unsaturated Fatty Acids in Experimental Renal Injury and Lack of Oxygen).*

Poisoning by mercuric chloride showed an increased unsaturated fat content of the kidney, but poisoning by cantharides showed a decrease. The suggestion is made that the difference in effect of the unsaturated fatty acids of the kidney to the two types of renal poisons may be related to the supply and utilization of oxygen. Rats fed on practically fat free diets were found more sensitive to oxygen deprivation than rats fed normal diets; and they also showed a more rapid loss of unsaturated fatty acids in the various organs.

(Zeitschrift fur die gesamte Experimentelle Medizin, volume 88, pages 693-704, 1933.)

42. Tanze, U.—*The Effects of Fatty Acids on Nutrition.*

Fat starved rats developed a definite nutritional disorder characterized by a loss of hair, later an inflammation, then dermatitis and scaly skin. The eyes were swollen and closed, though the changes were not due to vitamin A deficiency. There was a retarded growth. Immediately upon restoring linoleic acid to the diet, a soft fine coating of hair appeared in the denuded areas, growth was normally resumed and the animals became normal. The hair developed a lustrous sheen and the eyes became extremely bright and clear. Oleic acid was ineffective and linolenic acid was neither constant nor at any time as effective as linoleic acid. No sparing action of linoleic acid or linolenic acid for vitamin B was found. Soybean oil was tested but was not comparable with linoleic acid in its effect. The fatty acids from cod liver oil were not effective.

(Scientific Papers from the Institute for Physical and Chemical Research, Tokyo, volume 20, pages 13-28, 1932, and volume 22, pages 1-14, 1933.)

43. Hinsberg, K., and Holland, G.—*Ueber das Jodbindungsvermögen im Blute unter Normaler und Pathologischer Verbindung (The Iodine Absorption Value of the Blood Fats in Normal and Pathological Conditions).*

The values for unsaturated fatty acids are constant for normal persons but are increased in diseases of the liver and in pernicious anemia. The administration of linoleic acid by mouth lowered the blood sugar in diabetics sometimes as much as 100 per cent. in from three to four hours.

(Klinische Wochenschrift, volume 12, pages 1601-1602, 1933.)

44. McCollum, E. V., and Becker, J. E.—*Linoleic Acid Indispensable to Normal Nutrition.*

A diet containing everything else which is essential but lacking in linoleic acid will fail to maintain life. It must therefore be provided in food.

(Food, Nutrition and Health, Baltimore, 1933.)

1934

45. Burr, G. O., and Beber, A. G.—*Metabolism Studies with Rats Suffering from Fat Deficiency.*

The experiments clearly show that fat deficient rats are very different from stock animals and that fat deficient rats which have been cured with small doses of fats return to a much more nearly normal gas exchange. The most marked difference shown by fat deficient rats are higher basal rate, higher specific dynamic action of food and higher respiratory quotients. Rats synthesize large amounts of fat daily, but this synthetic fat does not prevent the fat deficiency disease.

(Proceedings of the Society for Experimental Biology and Medicine, volume 31, pages 911-912, 1934.)

46. Holland, G., and Hinsberg, K.—*Ueber die Physiologische Bedeutung Ungesättigter Fettsäuren und das Jodbindungesvermögen des Blutes (The Physiological Significance of Unsaturated Fatty Acids and the Iodine Absorption of the Blood).*

The average value of the iodine absorption number of the blood serum is between 500 and 600 mg. per cent and shows very little variation. In cases with marked cardiac decompensation, the value doubled and dropped to normal as compensation became established. In cardiac disease with good compensation there is little change in the value. In pernicious anemia liver treatment reduced the iodine absorption value from a high to a normal amount. Upon discontinuing liver treatment, the unsaturated fatty acids again rose.

(Zeitschrift fur die gesamte Experimentelle Medizin, volume 94, pages 485-494, 1934.)

47. Evans, H. M., Lepkovsky, S., and Murphy, Elizabeth A.—*Vital Need of the Body for Certain Unsaturated Fatty Acids (a digest of three communications).*

A fat free diet although adequate in other vitamins showed a failure in the production of young in 20 per cent. of the female rats after implantation had occurred.

In a much higher percentage, abnormal pregnancies were evidenced by a peculiarly prolonged gestation period, and a difficult parturition due to impairment of the birth mechanism. Eighty per cent. of the young were born dead and the rest died soon after birth. Successful gestation on fat free diets is therefore impossible.

Fortification with carotin or with increased amounts of vitamins A, D and E did not essentially modify the outcome. The addition of a preparation containing essential unsaturated fatty acids improved the percentage of pregnancies, the number of young born alive, the gestation mechanism and period and the ease of parturition.

The unsaturated fatty acids are again referred to as vitamin F which, in addition to the early findings of Evans, Lepkovsky and Burr, seems to refer to the identical unsaturates related to the Burr fat deficiency syndrome. Sex instinct is diminished with vitamin F deficiency and restored when vitamin F is returned to the diet.

(*Journal of Biological Chemistry, volume 106, pages 431, 441, and 445, 1934.*)

1935

48. Oncken, Mildred—*Unsaturated Fatty Acids (Vitamin F) Deficiency.*

Oncken reviews much of the literature and reports experiments suggesting that the vitamin F content of the blood is reduced even in mild infections such as the common head cold. A deliberate use of vitamin F based on this observation was successful in the treatment of white rats suffering from "snuffles."

Oncken emphasizes the depletion of vitamin F in the daily diet due to the increased use of hydrogenated fats and in many instances of the replacing of fats by nutritionally inadequate substances.

(*Illinois Medical Journal, volume 67, pages 236-239, 1935.*)

49. Williams, H. H., and Anderson, W. E.—*The Liver and Theory of Fatty Acid Desaturation.*

Reference is made to the indispensability of linoleic acid in the diet and to the probably outstanding importance of this acid in the liver. Linoleic acid is accepted as a necessary constituent of the food together with the amino acids of the proteins, the vitamins, salts, etc.

(*Oil and Soap, March, 1935.*)

50. Boyd, E. M.—*The Lipopenia of Fever.*

Boyd corroborates the finding that the blood lipids respond to febrile conditions. He points out that the onset of fever is accompanied by a sudden flood of unsaturated fatty acids (vitamin F) into the blood stream. He interprets the result as indicating a general derangement of fat metabolism in fever which he suggests as being due probably to an excessive removal of transport fats from the plasma by the active body tissues. An excellent bibliography is appended.

(*Canadian Medical Association Journal, volume 32, pages 500-506, 1935.*)

51. Haven, Francis L.—*Effect of Dietary Fats on Growth and Composition of Tumors.*

In a study of the various fats it was found that the growth tendencies of rat tumors on cocoanut oil diets were greater than those of rat tumors on cod liver oil diets.

The inhibitory action of unsaturated fats on the growth of tumors is explained by the theory that phospholipids function as oxygen transport agents within the cells. The incorporation of unsaturated fatty acids into the phospholipids of tumor cells may aid respiration and thus may inhibit tumor growth.

Proceedings of the Society for Experimental Biology and Medicine, volume 32, pages 734-737, 1935.)

52. Lepkovsky, S., Ouer, R. A., and Evans, H. M.—*The Nutritive Value of the Fatty Acids of Lard and Some of Their Esters.*

Under conditions that were strictly constant so that the only variable factor was the character of the fat employed, lesions corroborating the kidney lesions first suggested by Burr were found. The glycerides of the fatty acids of lard seem to be the best for the prevention of these lesions. Since glycerides are hydrolyzed in the intestinal tract, the authors found it difficult to understand the inferiority due to the direct feeding of a mixture of glycerol and free fatty acids, as compared with the glycerides of the fatty acids themselves.

(*Journal of Biological Chemistry, volume 108, pages 431-438, 1935.*)

53. Evans, H. M., and Lepkovsky, S.—*The Sparing Action of Fat in Vitamin B.*

The experiments reported here permit the conclusion that fat does not spare vitamin B by reducing the loss of this vitamin in the feces but by decreasing the amount of this vitamin dissipated in the metabolism of the rat. The liver was found to be the site of the greatest initial withdrawal of vitamin B. and a high fat diet definitely diminished the withdrawal.

(*Journal of Biological Chemistry, volume 108, pages 439-455, 1935.*)

54. Sinclair, R. G.—*Metabolism of the Phospholipids.*

A microprocedure is described, making it possible to determine the relative proportions and the iodine numbers of the saturated solid and the unsaturated liquid fatty acids in 30 to 40 mg samples of material.

The author finds evidence of the selection and retention of highly unsaturated fatty acids by tissue phospholipids. From previous findings Sinclair suggests that there are at least two classes of phospholipids; one comprises the more highly unsaturated phospholipids and functions in the essential make-up of the cell, and the other comprises less saturated phospholipids functioning as an intermediary product in the metabolism of fat. Both classes are present in the liver but in skeletal muscle the phospholipid is mainly of the non-metabolic type.

(*Journal of Biological Chemistry, volume 111, pages 261, 275, and 515, 1935.*)

55. Lecoq, R.—*Peut-on, dans une Ration Equilibrée, Substituer Aux Glycerides Les Acides Gras Qui Leur Correspondent? (Question of Substituting Fatty Acids for Glycerides in a Balanced Diet).*

Lecoq reports experiments on pigeons in which it was found that in a balanced diet containing natural fats such as butter, linseed oil, etc., it was impossible to substitute the corresponding fatty acids without causing malnutrition and signs of vitamin B deficiency. The author notes that some essential substance is likely to be removed in the process of preparing the fatty acids.

(*Comptes rendus d l' Academie des Sciences, volume 200, pages 1979-1980, 1935.*)

1936

56. Cox, W. M., and Inboden, M.—*A Purified Diet Satisfactory for Growth, Reproduction and Lactation in Rats.*

The purified diet suggested consists of casein, dextrin, lard-wheat germ oil, aqueous extract of brewer's yeast, carotene, calcium acetate, salt mixture and rice cellulose.

Proceedings of the Society for Experimental Biology and Medicine, volume 34, pages 443, 446, 1936.)

57. Brown, W. R., and Burr, G. O.—*Some Recent Studies in Fat Deficiency.*

A composite growth curve for more than 200 rats on fat deficient diets are practically identical with the earlier work published by Burr and his associates. Relatively impure diets can be used for producing fat deficiency symptoms.

Buttermilk lipids though rich in unsaturates are not curative when fed to rats showing the fat deficiency syndrome. Yeast oil is also ineffective. Scaliness decreases during the summer months so that humidity is related to the severity of the symptoms being less severe in summer and more severe in winter.

(*Journal of Biological Chemistry, volume 114, page XVI, 1936.*)

58. McAmis, A. J., and Sweet, M. H.—*The Influence of a Diet Rich in Avocado on Growth and on the Quality of Body Fat in the Albino Rat.*

When avocado was used as the main constituent of the diet and supplemented by dried skim milk, the growth of rats compared favorably with that of animals on adequate stock diets.

(*Journal of Biological Chemistry, volume 114, pages L XIV, 1936.*)

59. Sinclair, R. G.—*Evidence of the Synthesis of Essential Unsaturated Fatty Acids by the Rat.*

Sinclair finds that the growth of rats raised on a diet devoid of unsaturated fatty acids is distinctly subnormal, yet considerable. A high intake of elaidin almost completely abolishes the limited synthesis of highly unsaturated fats from carbohydrates and thus prevents growth.

(*Journal of Biological Chemistry, volume 114, page XCIV, 1936.*)

60. Stosser, A. V.—*Iodine Number of Serum Fatty Acids in Acute Infections of Infants with and Without Eczema.*

Stosser refers to the work of Hansen and to his own previous report, observing that the total cholesterol value was much less at the height of the infection than during the period of convalescence. Pneumonia showed the greatest change, eczema showed some change.

Proceedings of the Society for Experimental Biology and Medicine, volume 34, pages 10-11, 1936.)

61. Shepherd, M. I.—*Vitamin F in Skin Creams.*

Shepherd reviews the development of the vitamin F concept in relation to the lecithin, cholesterol and vitamin F content of the skin. The empiric use of linseed oil is reviewed in the light of its effectiveness because of its unsuspected vitamin F content. A ratio for normal skin between cholesterol, lecithin and total unsaturates including vitamin F was given as 1:1:3.

(Drug and Cosmetic Industry, March, 1936.)

62. Shepherd, M. I., and Linn, E. R.—*Evaluation of Vitamin F.*

A detailed procedure for the quantitative estimation of vitamin F effectiveness is proposed, suggesting a unit. The vitamin F is externally applied. Vitamin F is present in nomal rat skin but not in rat skin derived from animals suffering the Burr fat deficiency syndrome. Emphasis is made on the probable value of the vitamin F content of lard when this material serves as an ointment paste in the treatment of eczema and other conditions.

(Drug and Cosmetic Industry, May, 1936.)

63. Shepherd, M. I., and McMath, Dorothy C.—*Lipid Balance in Creams.*

Creams which represent modified ointments are formulated so as to include the fat ratio in which the lipids comprising lecithin, cholesterol and vitamin F are proportioned in the ratio of 1:1:3.

(Drug and Cosmetic Industry, July, 1936.)

64. Glennon, Katherine—*Vitamin Soaps.*

The effectiveness of official Sapo mollis and the dependence of this effectiveness on the presence of vitamin F in the linseed oil from which Sapo mollis is prepared, suggests that all soap becomes more effective if a definitely known quantity of vitamin F is purposely added. The quantity suggested is about 125 vitamin F units per gram of soap.

(Soap, November, 1936.)

65. Pacini, August J., and Avis, H. Wentworth—*Vitamin F in Cosmetics.*

A complete discussion of the natural occurrence of vitamin F is presented. Oils are divided into four groups: the wide variation of vitamin F content due to natural causes is shown for each of the four groups. Vitamin F deficiency symptoms are detailed and the curative effects of vitamin F on the human skin are exemplified by actual microphotographs.

The relation of vitamin F to the lustre and pliability of human hair is disclosed as a corroboration in the human of the improvement in fur quality frequently reported for laboratory animals.

The inadvisability of using other than biologically standardized vitamin F material is compared to the identical case in the use of cod liver oil as in vitamin A and D source without further knowledge of the exact A and D content.

The resemblance of vitamin F to the ricinoleates in a remarkable detoxifying property is discussed.

Some evidence is advanced which indicates that all vitamin F is linoleic acid but not all linoleic acid isomers are vitamin F. Thus, neither the unsaturation of the fat nor the chemical detection of a linoleic isomer is sufficient as a measure of vitamin F effectiveness. Biological assay is imperative.

(Soap, Perfumery and Cosmetics, September, 1936.)

66. Pacini, August J.—*Vitamin F (Unsaturates).*

Symptoms suggesting vitamin F deficiency are apparently more prevalent among humans than symptoms suggesting deficiencies due to all other vitamins combined. Dry skin, brittle, lustreless and falling hair, dandruff, brittle fingernails and eczema, and kidney disease are exaggerately numerous and ubiquitously distributed. The relation of vitamins to perfumes passing through intermediate products such as sex hormones and the like is pointed out as a relation much deeper than the apparent superficial difference. The importance of measured vitamin values and the elimination of the use of crude, unstandardized materials is stressed. The immunological and detoxifying properties of vitamin F, like those of the ricinoleates, are discussed.

(American Perfumer, December, 1936.)

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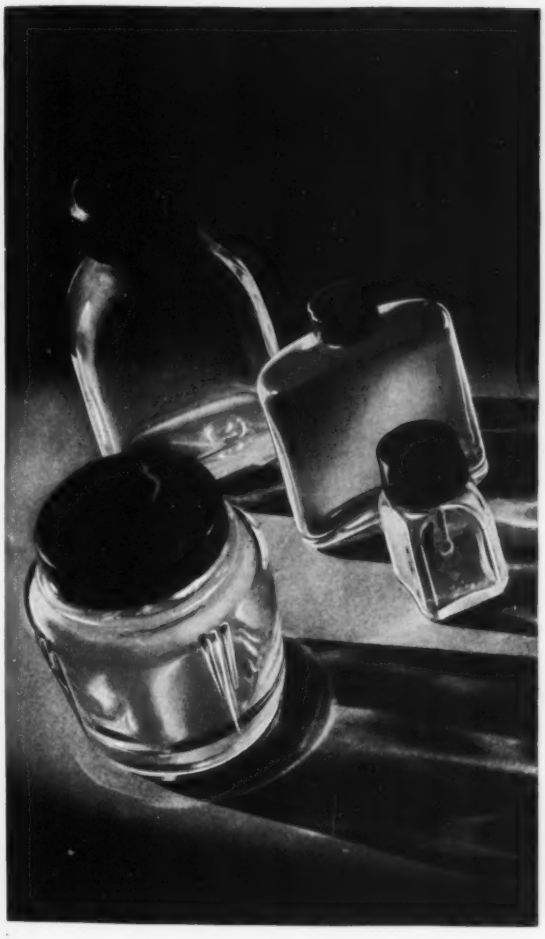
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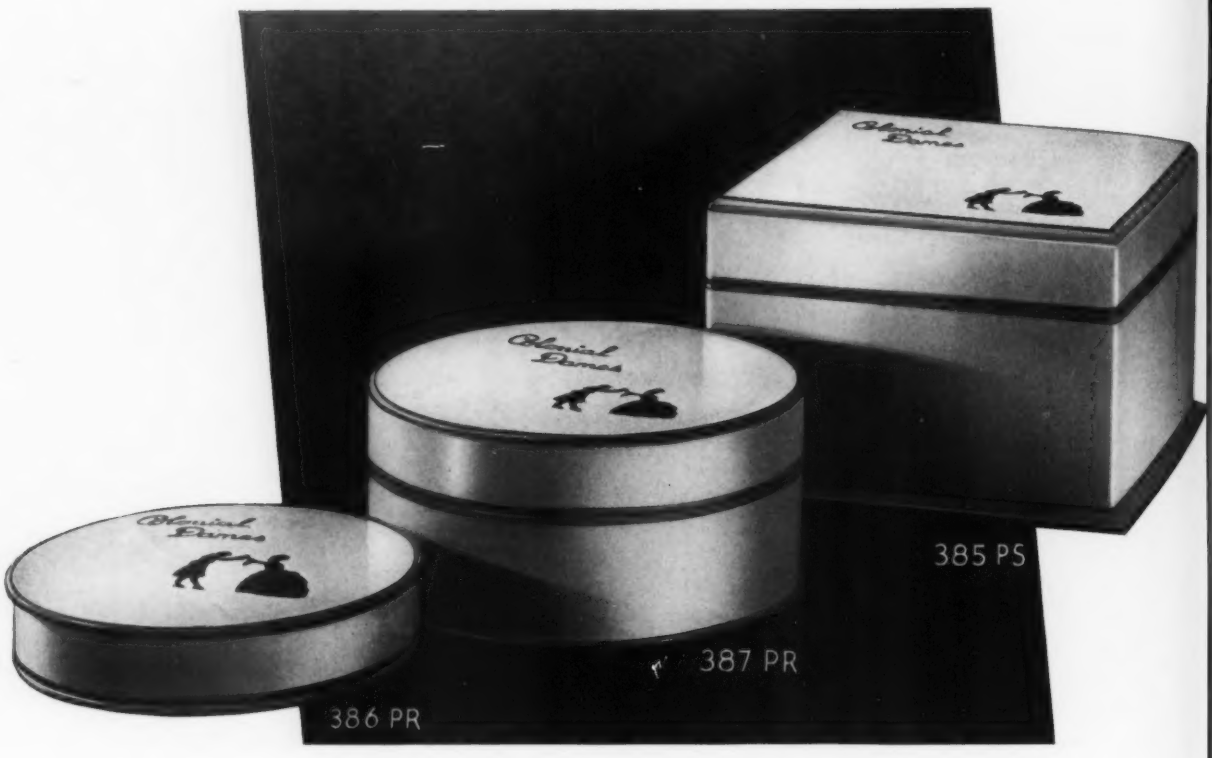
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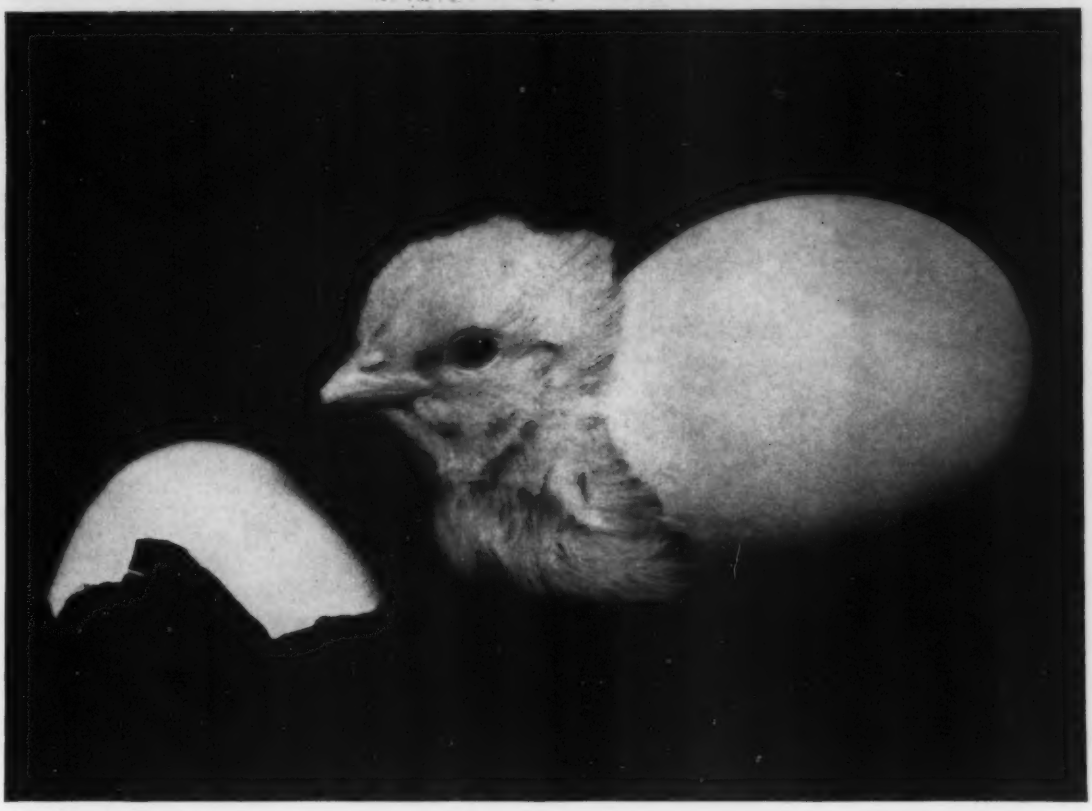
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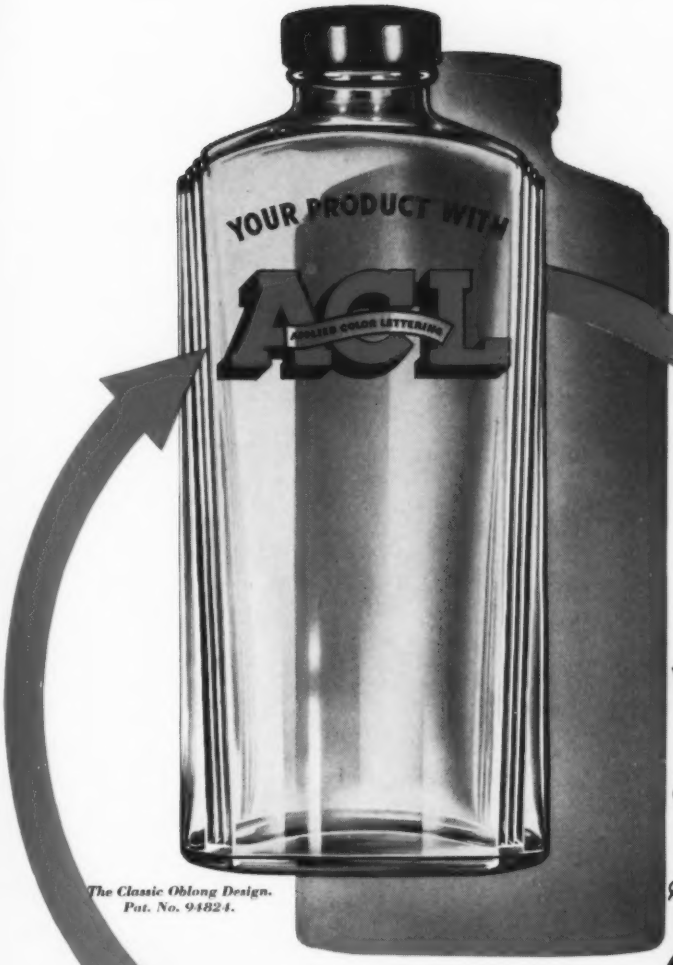
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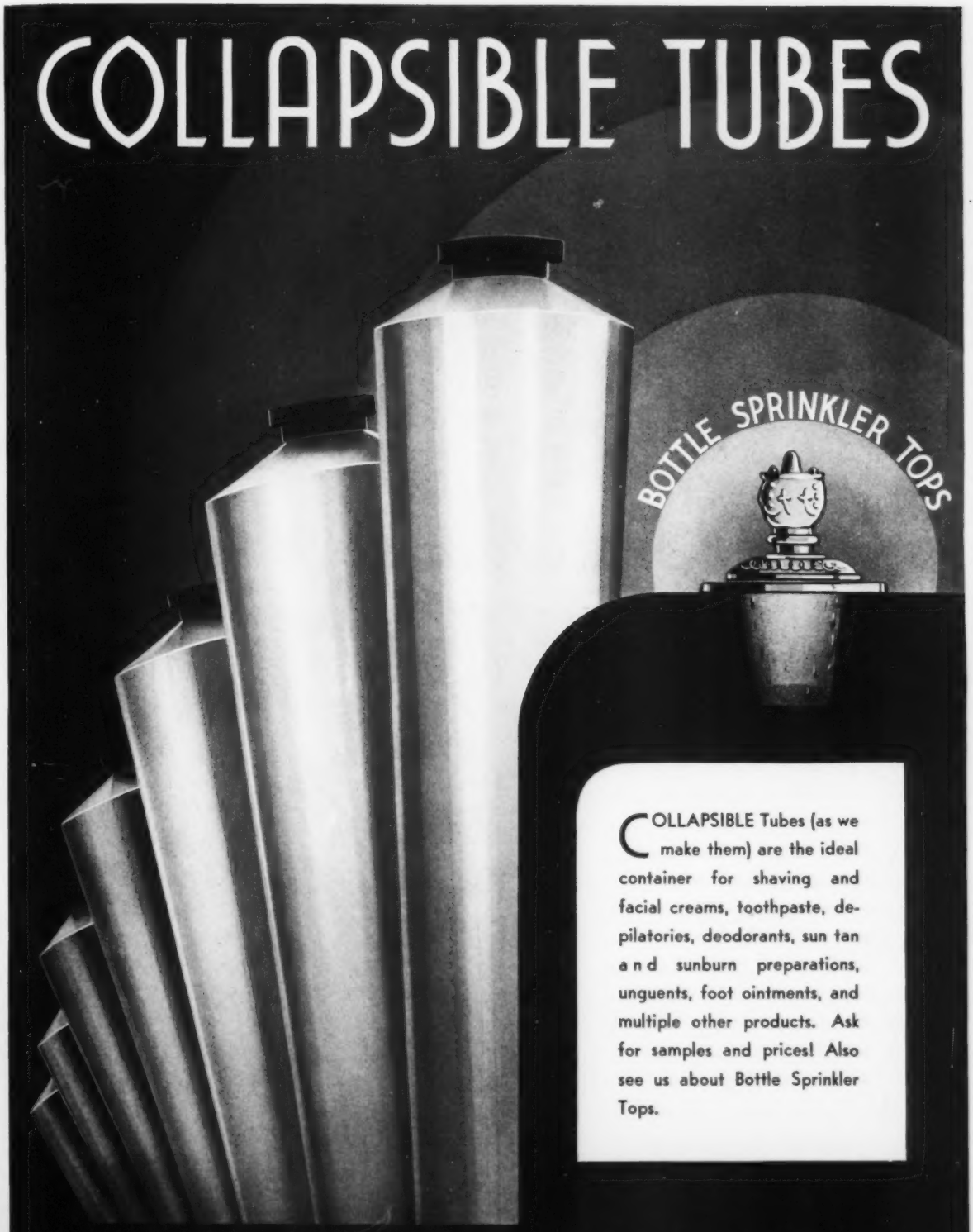
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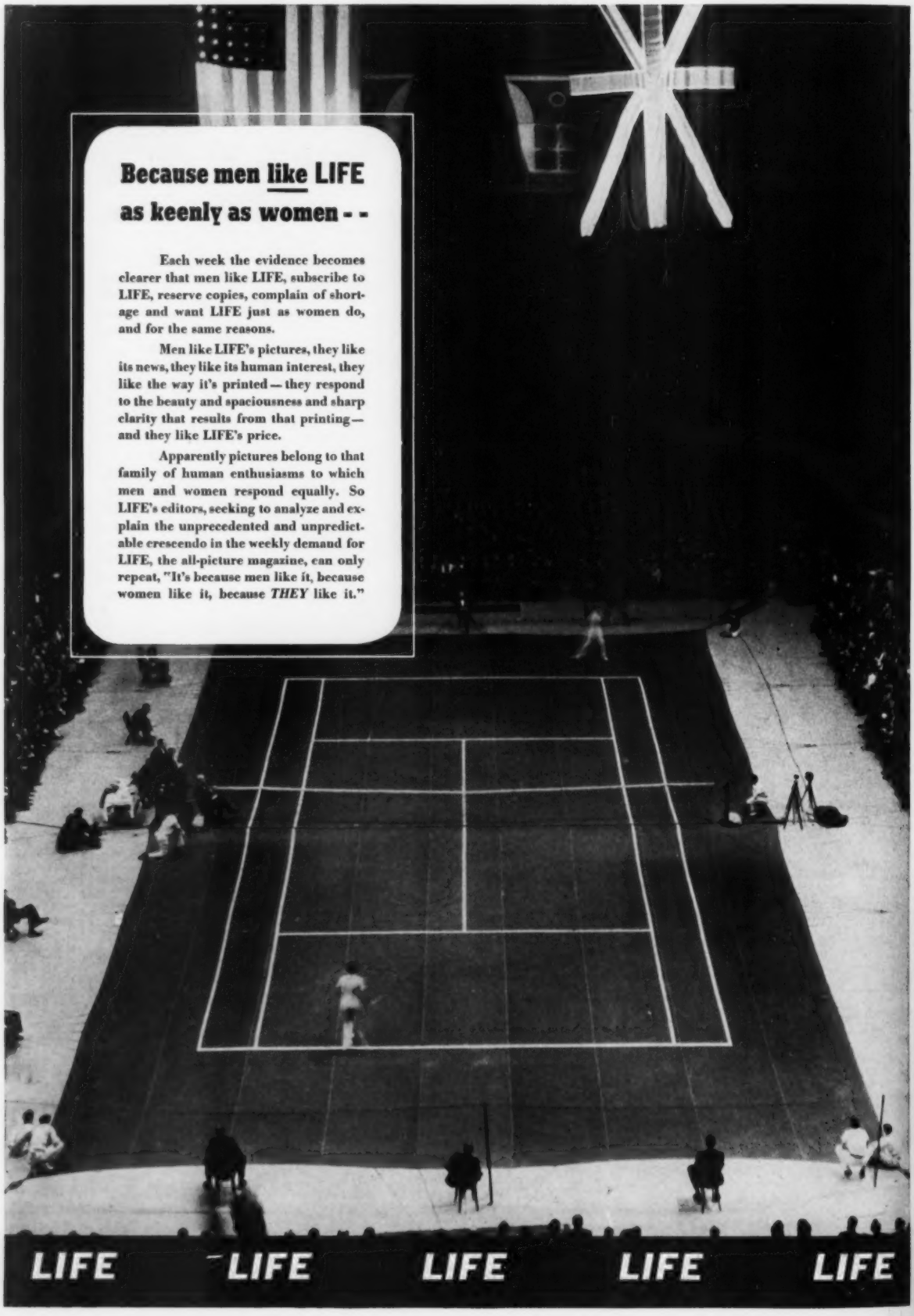
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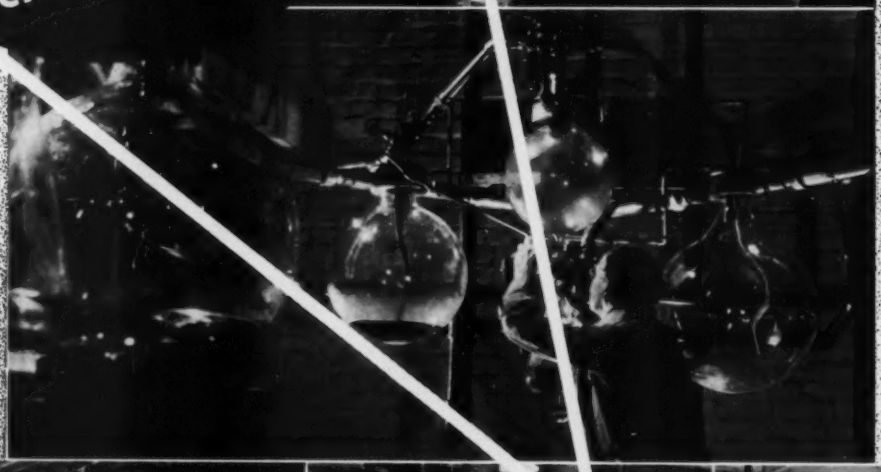
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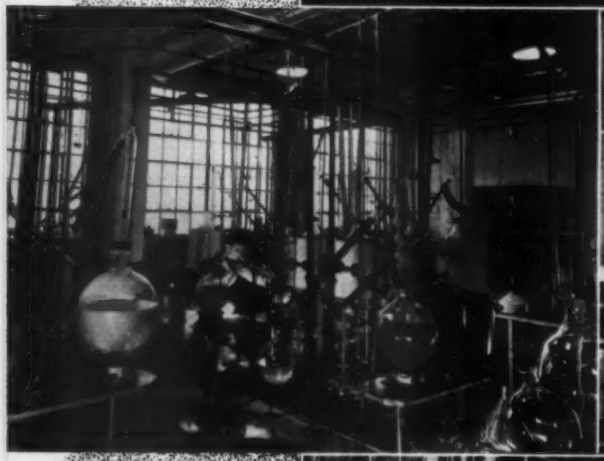
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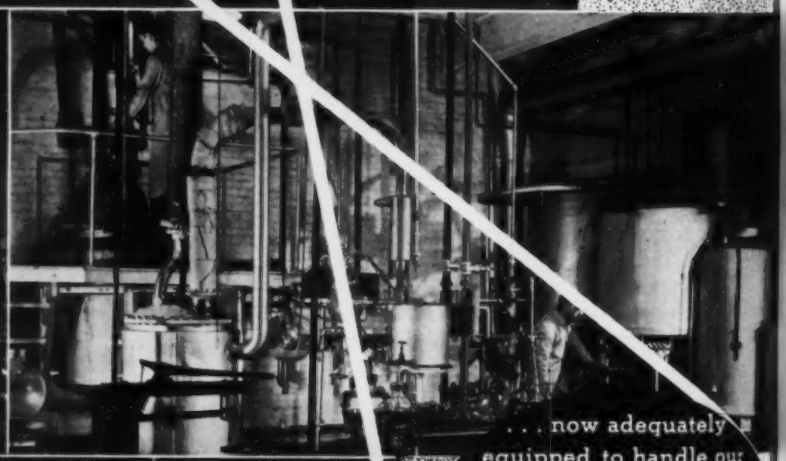
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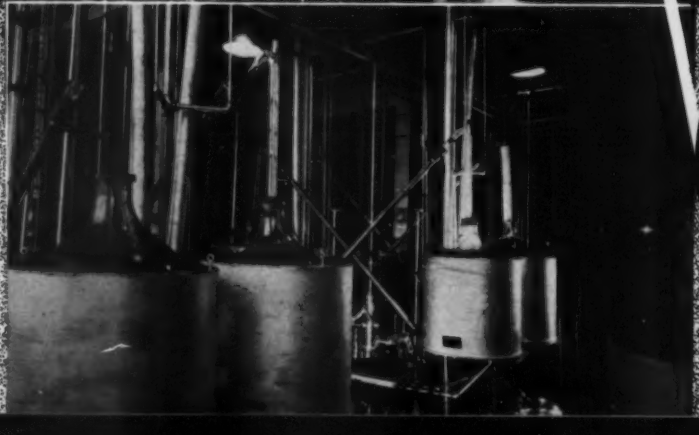
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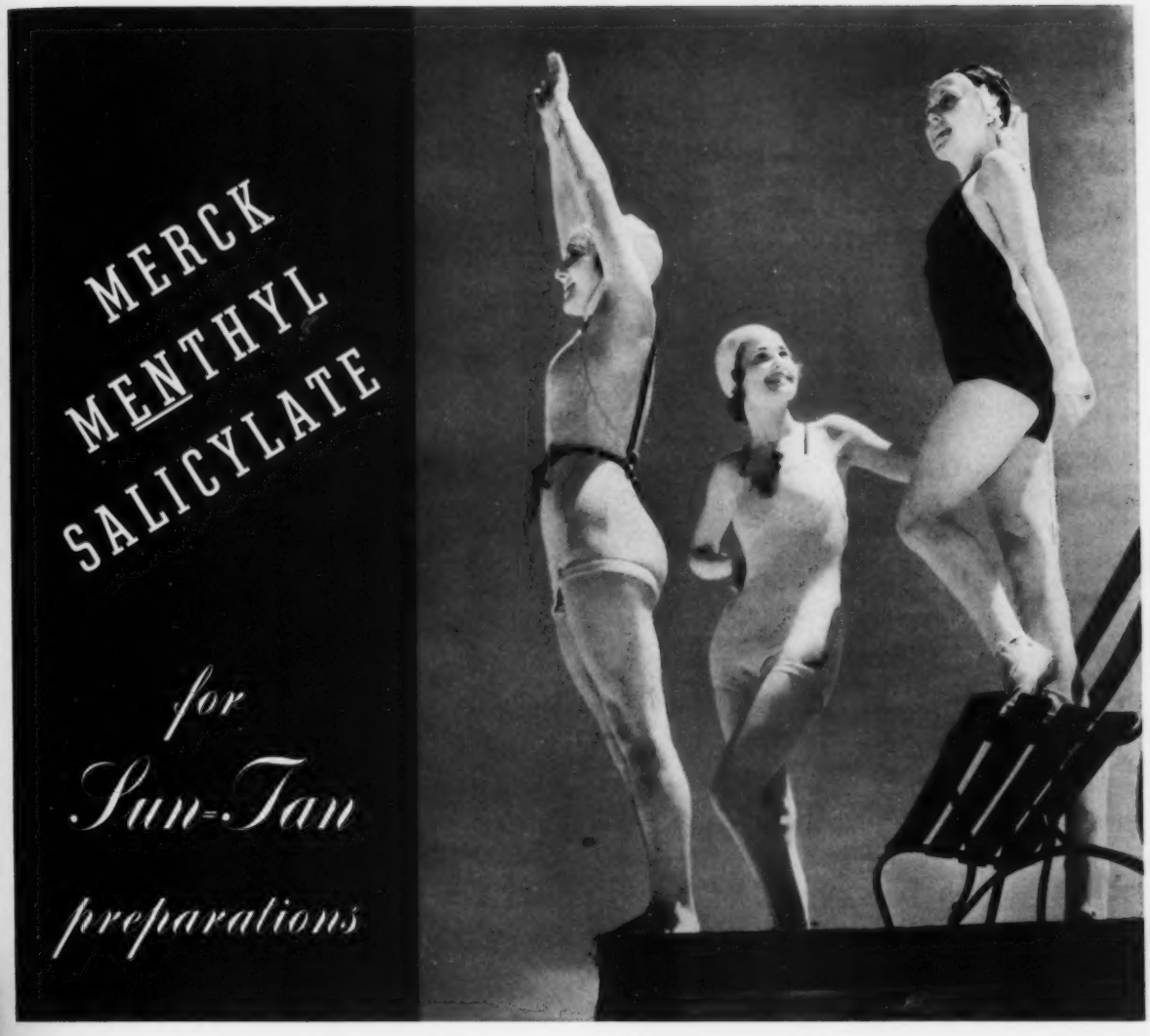
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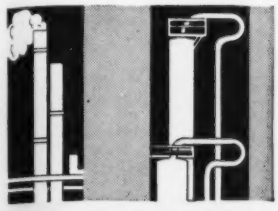
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COSMETICS · TOILET PREPARATIONS

CONTENTS • MARCH • 1937

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FIRST HONORS



First honors in the Irwin D. Wolf Awards Competition for distinctive merit in packaging were taken this year by "Adrienne" cosmetics, manufactured by the United Drug Co. The fine qualities of these packages were first recognized in a special article by Ruth Hooper Larisson which appeared in the Perfumer last May. They were designed by Gustav Jensen who also designed the cover of this magazine.

The American Perfumer · Cosmetics · Toilet Preparations

MARCH•1937

Toilet Preparations Rules May Bar PM's-Demonstrators

THE Federal Trade Commission has made public proposed trade practice rules for the perfume and toilet preparations industry following the recent Trade Practice Conference in New York. Members of the industry have until March 23 to present their views regarding these rules to the Commission. Suggestions and protests will be given consideration and the Commission will then proceed to final action.

The following rules are thus submitted tentatively. They are not officially in effect until finally promulgated by the Commission. Group One rules are those which will have the force of law and on which the Trade Commission will assist enforcement. Group Two rules are those which are permitted by the Commission as an expression of the consensus of the industry, but whose enforcement is voluntary.

The rules have been drafted so as theoretically to permit the use of PM's and demonstrators. However, a study of Rules 11 and 12 seems to show that it would be impractical for any manufacturer to attempt to use either method, should they finally go into effect as they appear at present.

Readers are urged to read an explanatory editorial on Page 73.

GROUP I

Rule 1:

(a) *Prohibited Discriminatory Differentials, Rebates, Refunds, Discounts, Credits and Other Allowances.* It is an unfair trade practice for any member of the industry engaged in commerce[1], in the course of such commerce, to grant or allow, secretly or openly, directly or indirectly, any price differentials, rebates, refunds, discounts, credits or other allowances which effectuate a discrimination in price between different purchasers of goods of like grade and quality where either or any of the purchases involved therein are in commerce[1] and where the effect thereof may be substantially to lessen competition or tend to create a monopoly in any line of commerce[1] or to injure, destroy or prevent competition with any person who either grants or knowingly receives the benefit of such discrimination or with customers of either of them. *Provided, however—*

(1) That the goods involved in any such transaction are sold for use, consumption or resale within any place under the jurisdiction of the United States;

(2) That nothing herein contained shall prevent differentials which make only due allowance for differences in the cost of manufacture, sale or delivery resulting from the differing methods or quantities in which such commodities are to such purchasers sold or delivered;

(3) That nothing herein contained shall prevent persons engaged in selling goods, wares or merchandise in commerce[1] from selecting their own customers in bona fide transaction and not in restraint of trade;

(4) That nothing herein contained

[1] *As herein used, the word "commerce" means trade or commerce among the several States and with foreign nations, or between the District of Columbia or any Territory of the United States and any State, Territory or foreign nation, or between any insular possessions or other places under the jurisdiction of the United States, or between any such possession or place and any State or Territory of the United States or the District of Columbia or any foreign nation, or within the District of Columbia or any Territory or any insular possession or other place under the jurisdiction of the United States; Provided, That this shall apply to the Philippine Islands.*

shall prevent price changes from time to time where made in response to changing conditions affecting either (a) the market for the goods concerned, or (b) the marketability of the goods, such as, but not limited to, actual or imminent deterioration of perishable goods, obsolescence of seasonal goods, distress sales under court process, or sales in good faith in discontinuance of business in the goods concerned.

(b) *Prohibited Brokerages and Commissions.* It is an unfair trade practice for any member of the industry engaged in commerce[1], in the course of such commerce, to pay or grant, or to receive or accept, anything of value as a commission, brokerage, or other compensation, or any allowance or discount in lieu thereof, except for services rendered in connection with the sale or purchase of goods, wares, or merchandise, either to the other party to such transaction or to an agent, representative, or other intermediary therein where such intermediary is acting in fact for or in behalf, or is subject to the direct or indirect control, of any party to such transactions other than the person by whom such compensation is so granted or paid.

(c) *Prohibited Advertising or Promotional Allowances, Etc.* It is an unfair trade practice for any member of the industry engaged in commerce[1] to pay or contract for the payment of advertising or promotion allowances or any other thing of value to or for the benefit of a customer of such member in the course of such commerce as compensation or in consideration for any services or facilities furnished by or through such customer in connection with the processing, handling, sale or offering for sale of any products or commodities manufactured, sold or offered for sale by such member, unless such payment or consideration is available on proportionally equal terms to all other customers competing in the distribution of such products or commodities.

(d) *Prohibited Discriminatory Services or Facilities.* It is an unfair trade practice for any member of the industry engaged in commerce[1] to discriminate in favor of one purchaser against another purchaser or purchasers of a commodity bought for resale, with or without processing, by contracting to furnish or by furnishing, or by contributing to the furnishing of any services or facilities connected with the processing, handling, sale or offering for sale of such commodity so purchased upon terms not accorded to all purchasers on proportionally equal terms.

(e) *Illegal Price Discrimination.* It is an unfair trade practice for any member of the industry or other person engaged in commerce[2], in the course of such commerce, to discriminate in price in any other respect contrary to Section 2 of the Clayton Act as amended by the Act of Congress, approved June 19, 1936, (Public No. 692, 74th Congress), or knowingly to induce or receive a discrimination in price which is prohibited by such section as amended.

Rule 2:

It is an unfair trade practice for a member of the industry directly or indirectly to give, or offer to give, or permit or cause to be given, money or anything of value to agents, employees or representatives of customers or prospective customers, or to agents, employees or representatives of competitors' customers or prospective customers, without the knowledge of their employers or principals, as an inducement to influence their employers or principals to purchase or contract to purchase products manufactured or sold by such industry member or the maker of such gift or offer, or to influence such employers or principals to refrain from dealing in the product of competitors or from dealing or contracting to deal with competitors.

Rule 3:

The making, or causing or permitting to be made or published, any false, untrue or deceptive statement, representation, guarantee, warranty, testimonial or endorsement, by way of advertising (through newspapers, magazines, circulars, labels, booklets, or by radio or any other medium), or by oral representation or otherwise, in connection with the sale or distribution of any products of the industry, and concerning the efficacy, the medicinal or curative properties or other properties, or the grade, quality, quantity, substance, character, origin, size, preparation, manufacture or distribution of any product of the industry, or concerning the purported approval or endorsement of such product by state, federal, medical, or other authority, or in any other material, respect, with the tendency, capacity or effect of misleading or deceiving purchasers, prospective purchasers or the consuming public, is an unfair trade practice.

Rule 4:

Offering merchandise for sale at prices purported to be reduced from what are in fact marked-up or fictitious prices, with the tendency or capacity to mislead or deceive purchasers, prospective purchasers or the consuming public, is an unfair trade practice.

Rule 5:

The defamation of competitors by falsely imputing to them dishonorable conduct, inability to perform contracts or questionable credit standing, or by other false representations, or the false disparagement of the grade or quality of the goods of competitors, their credit terms, values, policies, services, the nature or form of the business conducted, or in any other material respect, with the tendency or capacity to mislead or deceive purchasers, prospective purchasers or the consuming public, is an unfair trade practice.

Rule 6:

The false or deceptive marking or branding of products of the industry, for the purpose or with the tendency, capacity or effect of misleading or deceiving purchasers, prospective purchasers or the consuming public with respect to the brand, grade, quality, quantity, use, size, material, content, origin, preparation, manufacture or distribution of such products, or in any other material respect, is an unfair trade practice.

Rule 7:

The imitation of the trade-marks, trade names, brands, labels or other marks of identification of competitors, with the tendency, capacity or effect of misleading or deceiving purchasers, prospective purchasers or the consuming public is an unfair trade practice.

Rule 8:

To sell, offer to sell, or advertise industry products as and for copies, blends, reproductions or imitations of the products of another member of the industry, in such manner as to have the tendency, capacity or effect of misleading or deceiving purchasers, prospective purchasers or the consuming public, is an unfair trade practice.

Rule 9:

Falsely representing, directly or indirectly, through advertising, branding, labeling, or otherwise, that any industry product or products have been manufactured, mixed, blended, or compounded into the finished article abroad and imported into this country when in truth and in fact such product or products have been manufactured, mixed, blended, or compounded in the United States of America, is an unfair trade practice.

Rule 10:

The securing of information from competitors concerning their businesses by false or misleading statements or representations or by false impersonation of one in authority and the wrongful use thereof to unduly hinder or stifle the competition of such competitors is an unfair trade practice.

Rule 11:

It is an unfair trade practice for any member of the industry to give, pay or contract to pay, directly or indirectly, to any clerk or salesperson of any customer-retailer, "push money" or any other bonus, gratuity or payment, over and above any compensation received from such retailer by such person, as an inducement or encouragement to push or promote the sale of such member's product or products over competing products of other members of the industry.

(a) with the capacity and tendency or effect of thereby causing the purchasing or consuming public, when making purchases of such products, to be misled or deceived into the erroneous belief that such clerk or salesperson is free from any such special interest or influence, or is not so subsidized or paid by such member;

(b) or with the capacity and tendency or effect of thereby hampering and unduly restricting the legitimate free and full use and enjoyment of such retail trade outlets for the distribution to the public of competing products;

(c) or with the purpose or effect, directly or indirectly, of otherwise substantially lessening competition or unreasonably restraining trade in the mar-

(Continued on page 115)



Photo Ewing-Galloway

HAIR FIXATIVE CREAMS

In this article, **HENRY LEE-CHARLTON** *describes the three types of hair fixatives and gives explicit directions and formulae for the manufacture of each type. The first section discusses the emulsion types. A concluding installment will consider water soluble and mucilaginous fixatives.*

HAIR creams and other fixatives, as a class, undoubtedly occupy one of the most important positions in the field of masculine toilet requisites. Much has already been written on the subject of pomades and brilliantines; and for that reason I shall not pause to consider them here. Hair creams themselves can conveniently be divided into two main groups, i. e., those with a mucilaginous base and those which are true emulsions. It is with the emulsion type that I propose to deal first.

Lime Creams

As far back as 1864, Eugène Rimmel introduced a lime cream, which subsequently was copied (for the most part badly) by a host of imitators. Such lime creams frequently made use of almond, olive and peach kernel oils as the fatty basis and lime water as the alkali. Glycerin was also incorporated in many of them, as a mild additional hair fixative and stabilizing agent. The calcium soap formed by the lime water was not very satisfactory, however, and this soon led manufacturers to include powdered curd soap in their formulae. This practice also proved to be at fault, by reason of the marked tendency of the calcium oleate to separate out on standing, so that eventually the lime water was replaced entirely by distilled water.

Thus one finds an improved lime cream consisting of suitable vegetable oils, curd soap, glycerin (or diethylene glycol), and distilled water—the perfume frequently being oil of limes, either alone or in combination with other essential oils such as lemon or bergemot. The following working formula is a good example of this type of cream:

Powdered curd soap	25 oz.
Distilled water	18 pints
Glycerin	1 pint

Dissolve the soap in the water, by the application of gentle heat, add the glycerin, then pour the warm solution into the following, which should be brought carefully to the same temperature:

Arachis oil	23 pints
Perfume oil	6 oz.

Continue to stir at medium speed until nearly cool. Then fill into bottles. If desired, the preparation can be passed through a colloid mill or homogeniser first, in order to ensure maximum stability.

At the present time, such a formula as the above, though acceptable enough in its day, would in all probability be modified by replacing the sodium soap with triethanolamine stearate, formed *in situ*. Other minor improvements will doubtless suggest themselves to readers. Whether or not a so-called "lime" cream, containing only a trace of expressed or distilled oil of limes, is in fact justified in regard to nomenclature, I am rather inclined to doubt.

Various Emulsion Types

Historically, the next types of hair cream to make their appearance on the market were those based on (a) beeswax and borax, and (b) lanolin. Although many dogmatic assertions have been made to the effect that one emulsifying agent gives oil-in-water emulsions while another gives the water-in-oil variety—it can safely be said that practically all such emulsifiers are, under certain conditions (of formulation, processing, etc.) reversible; so that to generalize is merely to invite trouble. It is, of course, convenient to refer to triethanolamine stearate, glyceryl monostearate and diglycol stearate as O/W emulsifying agents, and to describe lanolin bases as W/O; but the whole complex problem of emulsion types and the relative degrees of stability by no means ends here.

When evolving a formula for a hair cream (or indeed any liquid cream) it is only logical, in the first instance, not to work in a haphazard fashion but to aim directly at producing either an oil-in-water or a water-in-oil emulsion. An emulsifying agent should then be selected,

and the formula built up from this, together with a stabilizing agent, oils and water. In general, it is unwise to attempt a combination of emulsifying agents of definitely opposite types (i. e. lanolin and triethanolamine soaps), although even this rule is subject to modification at times, as in the case of borax/beeswax combinations.

Method of procedure is at times even more important; thus it is not uncommon to find emulsion instability due entirely to such errors as—in the case of O/W emulsions—adding the aqueous part of the emulsion gradually to the oils, etc., instead of vice versa. This class of mistake is aggravated by the inclusion of glycerin or lanolin in the aqueous portion; for what happens then is that a water-in-oil emulsion is formed first, only to be switched over eventually into an oil-in-water emulsion. As it is well known that O/W emulsions are extremely prone to instability when reversed, the faultiness of such a procedure should be evident.

Another important factor in the stabilizing of emulsions is the relative viscosity of the two phases. If, in an O/W emulsion, the aqueous phase is not sufficiently viscous, there will be a tendency for the oil globules, even though thoroughly dispersed, to rise to the surface and cause "creaming" — a phenomenon that is none the less objectionable because of the fact that it is not identical with "splitting" or complete breakdown of the emulsion. Thus it is imperative that water-soluble ingredients should be sufficiently concentrated in the aqueous outer phase to give a viscosity that will prevent such surface orientation of the oil globules. In this connection it is also best, in the majority of cases, to use a fairly viscous mineral oil. If due attention is paid to these aspects of the problem, the possibility of ultimate separation will be materially reduced.

To return to borax/beeswax creams, we need only note that these are liquid modifications of ordinary cold cream and as such are, of course, water-in-oil emulsions. The procedure is to melt the beeswax and a small proportion of spermaceti or cetyl alcohol in rather more than 50 per cent of mineral oil. Into this fatty mixture is run, with constant stirring, a 1 per cent solution of borax in water. Variations in the proportions of ingredients used, as well as other modifications and additions (such as the use of a thick or thin mineral oil)—will all influence the final character and viscosity of the product. As hair fixatives, greasy creams of this type are quite effective—a fact that would seem to be due, in part at least, to the borax, even though this is present in a very low proportion.

Another type of greasy hair cream may be prepared by using lanolin or lanolin absorption base as the starting point. One of the best absorption bases on the market is claimed to be able to absorb up to 500 per cent of its own weight of water or aqueous solutions. This estimate appears, judging from personal experience, to be rather on the high side—but the fact remains that excellent liquid creams can be compounded by utilizing a base of this character. A good base will take up considerable quantities of water, fats, oils, glycerin, etc., as well as useful percentages of borax, menthol, formaldehyde, and many other ingredients that may be considered desirable.

Thus a very good lanolin hair cream may be compounded by admixing, at as little above room temperature as possible, 10 parts of a good absorption base with 30 parts of mineral oil or peanut oil, etc., and then slowly and with constant stirring adding to this about 50 or 60 parts of distilled water. The only other essential ingredients are a sufficiency of perfume oil and 0.1 per cent of methyl parahydroxybenzoate. An obvious advantage of this class of product is that its final viscosity is extremely simple to control. An important point to be observed, however, is that absorption bases are not improved by the application of heat, and it is therefore advisable to keep the working temperature as low as may be convenient.

Also deserving of mention, as a useful emulsifying agent for water-in-oil liquid creams, is a special soya margarine emulsifier sold under a familiar trade name. This product is a viscous, golden brown fluid, being actually a highly oxidized and polymerized soya bean oil. Originally designed for use in margarine manufacture, in which it has been moderately successful, it is chiefly of use with vegetable oils, and not particularly with those of mineral origin.

The first serious experiments, employing this oil as an emulsifying agent for cosmetic and toilet emulsions, were carried out some years ago by H. Wentworth Avis. In common with the present writer, Mr. Avis cannot agree with published statements to the effect that lime water, in place of distilled water, adds to the stability of such emulsions.

Hair creams compounded on a basis of the product usually incorporate from 3 to 6 per cent of the emulsifying agent, together with peanut, almond, peach kernel, avocado, or other suitable oils, distilled water and, occasionally, beeswax or spermaceti. A satisfactory cream can be made by adding 4 per cent of the soya emulsifiers to 50 of peanut oil, in which 1 per cent of beeswax has previously been incorporated by gentle heating; and then running into this 45 per cent of warm water, with constant rapid whisking. The finished cream is passed through a colloid mill or homogenizer, in order to refine the particle size and thus enhance its stability.

(A discussion of the water soluble hair fixatives will follow in an early issue.)

Toiletries Gaining in Rumania

Rumania presents a limited but growing market for all kinds of toilet preparations. Eighty percent of this country's population of some 19,000,000 are consumers of low priced toilet preparations. Cosmetics are also used among the male portion of the population to a considerable extent. The value of the total annual consumption of all kinds of cosmetics is estimated to amount to $7,135,700. Over 95 percent of the consumption is supplied by the local industry because of customs regulations which prohibit the importation of non-essential commodities, and because of exchange difficulties. By opening branch factories or leasing the right to manufacture products against payment of royalties, foreign manufacturers contributed to the creation of the Rumanian cosmetics industry, which now enjoys almost a monopoly.
(Consul Frederick P. Hibbard, Bucharest.)

EAVESDROPPING at the COUNTER



by Frederic S. Bailey

[] The Beauty Skin girl was waiting on an old customer whose attention was attracted to a sale going on in a nearby sales square. The product was a brand privately owned by the store and offering two jars for the price of one. All the employees had naturally been instructed to push the sale. The customer looked longingly at the "LifeSkin" sale sign. "I think I better take advantage of that sale," she said to the demonstrator who had already placed on the counter a jar of Beauty Skin cream which the woman bought regularly. The sales girl thought for a split second before she answered her. "Yes, you could save two dollars but how do you know that particular cream will agree as well with your skin? I know it's good but you haven't tried it out and two big jars will last a long time . I know you are satisfied with Beauty Skin Cream because you have been buying right along so why not stick to it? It's been worth the price in the past and it's just as much worth it now. Besides, your skin is used to it and that makes a lot of difference." The customer accepted the well given advice and I heaved a sigh of relief for I've always believed that women buy bargains just because they *are* bargains. "That wasn't so easy," the clerk told me later. "I don't like to knock or appear to knock other products and I do try to push store lines when I conscientiously can but I know my customer is better pleased than she would be if she had bought the bargain offer, better pleased than she would be if she had even bought just some other equally good cream. That's the store's problem, too, but they make their money on private brands, they think. But I know it's only against the background of known and liked brands.

[] I noticed the customer was smartly dressed as she stood at the counter enquiring of the girl selling the Mary Brown line, "I have been using Betty Smith preparations and I want to change, I don't think they are doing me good." "Alright," the clerk answered, "but before I show you some other products let's find out what the trouble has been so I'll know better just what you need. I want you to talk to the Betty Smith representative and we'll see what we can do about it." The other girl was brought into the picture, questions asked and answered. The woman's confidence grew with two clerks trying to conscientiously find out what she needed. The Mary Brown girl remained spokes-man-in-chief and ended up by reselling the customer on the Betty Smith line. "Couldn't you be fired for that," I asked her. "Listen, big boy," she said, "I have to think of the future and the Smith girl gets as much of that sort of thing as I do. She turns them back to me and we're quits with a dividend left over, because that woman will stay sold much longer this time and her friends won't be able to make her dissatisfied and some other demonstrator won't be able to switch her so easily. It's better for all of us to follow through on things like this than to just switch sales every time. Customers get too much in the habit of switches and then no one can hold them."

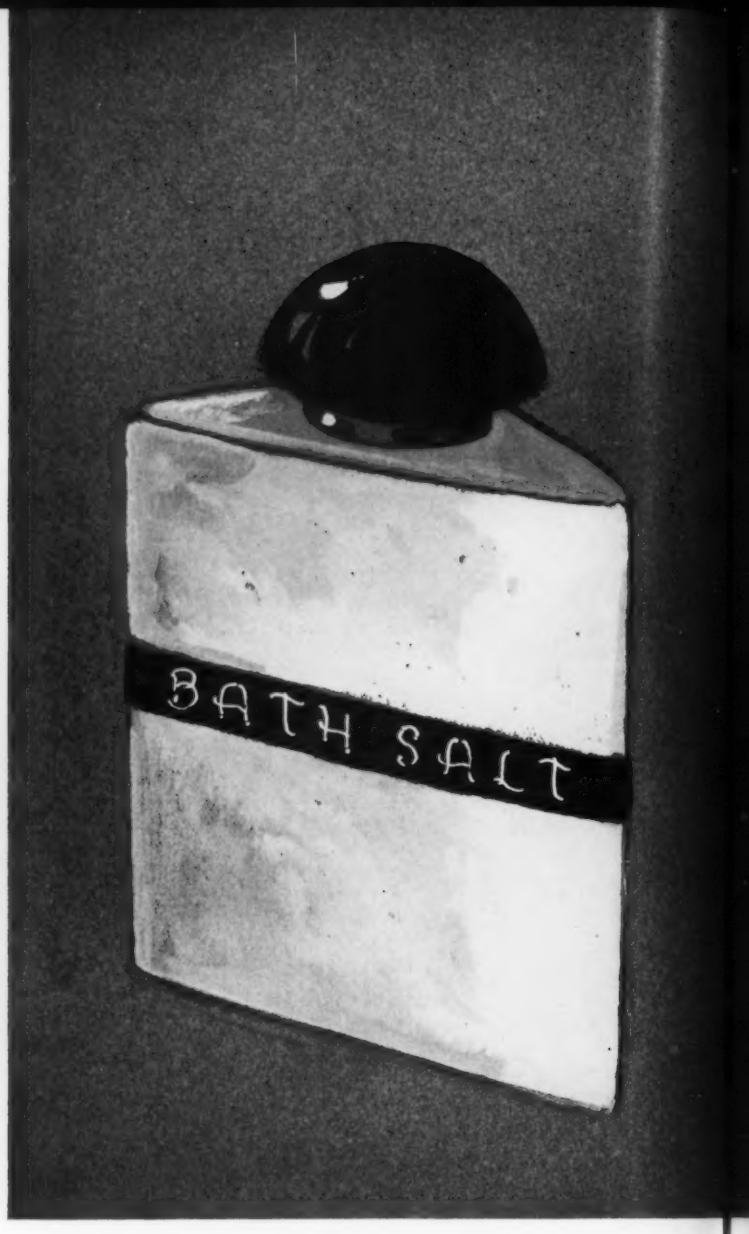
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I wondered how many representatives were smart enough to realize this point and how many companies smart enough to recognize it and capitalize on it.

page from a

Package Designer's Sketch Book

by E. LEONARD KOPPEL



Bath Salt

Material: Plastic or Opaque Glass.

The triangle shape will enable it to be placed on the inside corner of a built-in bath-tub and make it look as if it belonged there . . . plus 100% frontage for name of product.

Basic colors: jade green, ivory, orchid . . . with black raised center band and white debossed hand lettering.

The black top is knob-shaped for draining any water that may come from an overhead shower.



Shaving Soap

Remember when you used to press your nose against the barber shop window, and point with pride to Grandpa's new shaving mug prominently displayed in the center of the second shelf?

There lies the inspiration for this Shaving Soap unit. Brought up to the modern mode by its wooden simplicity. The inserted top is white plastic. The die cut seal is gold, with product and border in black and trade mark in white.

Tooth Paste

Boy meets Girl; Stoopnagle meets Budd; and a slogan meets a tube design.

This collapsible tube starts as a solid Black at the bottom and gradually becomes a pure white as it reaches the top.

And the slogan (not shown in above sketch) is printed in orange vermillion, on one side of tube and reads: ''As you hold this tube watch it get whiter, which means your teeth are growing brighter.''

The other side is for trade name of product.



WHY FORMULAE WON'T WORK

RALPH H. AUCH in this interesting study tells why so many published formulae are unsatisfactory in the laboratory and plant. He gives many useful hints on the modification of formulae to suit special conditions of manufacturing. The Perfumer publishes comparatively few detailed formulae for the very reasons which Mr. Auch describes so well. It prefers to limit its formulae to general indications leaving it to each chemist to adapt them to his own specific purpose. In manufacturing, formulae are important, but there are many other factors of equal importance to the production of a useful and saleable preparation. —EDITOR

IT is probably with a certain amount of fear and trembling that the conscientious editor publishes cosmetic formulae even though his contributor is a reputable specialist or even an expert on the subject discussed. The editor knows from previous experience that a number of his readers will be disappointed in any formula printed when they undertake to make it up. He has learned to expect this.

In fairness to the overwhelming majority of writers, let it be said that they include only reliable formulae that they have either developed themselves or adopted from or made and re-made over some other published work. The only exception that comes to mind is the occasional over-enthusiasm of a manufacturer's technical man or department when it has a new product to offer the trade. Incidentally, not only is such border-line material to be found in the trade press but in the technical journals as well.

In criticism of the average writer, it may be stated that he is so saturated with his subject that he takes too much for granted and is sometimes not specific enough. What is too obvious for mention to him may be just the stumbling block to the reader and experimenter, particularly if he is not well acquainted with the product in question.

The reader has reason to expect formulae appearing in his favorite journals to be reliable, readily workable and easily followed. However, he is unreasonable if he condemns a formula and its author if he fails in his first attempt. This is especially true if he is a novice or if he has no experimental background on the product he is undertaking to produce.

The reader should realize that it takes a certain amount of "know how" even in mechanical mixtures to say nothing of the more complex products, such as the various emulsions. He should be willing to follow directions explicitly when given or repeat the experiment varying the procedure each time in light of his failure, when the procedure is omitted or is incomplete or inadequate.

Before closing on generalities, one

other thought is advanced. Some experimenters are prone to introduce more than one variable into the problem of adjusting a formula to their needs or whims. If a cream lacks stability and in his opinion is too stiff, for instance, he may try to correct both in one swoop—in one subsequent experiment. Generally, this simply can't be done any more than one algebraic equation with two unknowns can be solved. Two unknowns require two equations—two undesirable qualities in the cream require at least two separate experiments. Sheer luck may enter in and he may succeed. What is far more likely is that he will throw out the whole mass (or is it mess) in utter disgust and a forceful, and if given to it, a profane denouncement of the author.

A number of various products taken at random will be discussed. Possible causes for disappointment in certain types of products will be touched upon to encourage thoroughness and alertness. Typical variations in raw materials, possible difference in procedure and the adverse effects of unsuitable equipment will be included.

This account of a few observations that are advanced is by no means exhaustive. At best they can only be suggestive. One thing may well be borne in mind. There is no sharp line of demarcation between those products the average manufacturer should undertake to make himself and those he is content to have made for his account by some private label specialist. In other words, he should be willing to spend some time and labor in experimentation on those products on which he has no previous experience to develop the required skill.

To illustrate: A man after finishing his restaurant meal asked the cashier who had baked the pie. Before she could reply the proprietor boastfully said "We do it in our own pastry kitchen!" Whereupon the diner remarked "May I suggest you let someone else make them for you," as he hastened out probably never to return. And some cosmetics go to market that reflect little credit on their manufacturers.

Creams

Starting with the simple emulsion creams, the temperature of manufacture and consistency, whether or not the cream is passed through some type of colloid mill, are perhaps the greatest causes of disappointment. The consistency is usually thinner if the cream is highly dispersed by a colloid mill, homogenizer or viscolizer. In a small experiment lot the cream may be entirely too stiff, therefore.

If paraffin is specified in the formulation, the author may have had in mind the usual melting point of 123-125° F. and the experimenter may use 128-133° F, so obviously the cream will also be stiff. If the position is reversed it will likely be too thin. If ceresin or ozokerite are included an entirely different melting point may be employed than the author anticipated, resulting in a cream too thin or too heavy bodied.

If either of these ingredients are employed, the mixing temperature must of necessity be higher than normally used, otherwise it may crystalize out in minute lumps before intimate mixture is attained.

Mineral oils also vary between very wide limits insofar as viscosity is concerned, from 65-75 second Saybolt on up.

The consistency of liquefying cleansing cream is affected by the melting point of ozokerite, ceresin and paraffin and the viscosity of the oil. It is also affected by the melting point of the petrolatum and whether it is short or long fibered. The latter property of petrolatum affects the ointment type cream such as bleach and freckle and the all-purpose cream as well as the treatment line creams, such as contour. This brings up the matter of lanolin whose creaming with water is somewhat of an art as is its incorporation with the other ingredients to lighten the color and reduce the "pull."

The vanishing or stearate type of cream is affected principally by the variation in stearic acid and the actual amount of alkali employed. To demonstrate. the variation in stearic acid, four different stearic acids were employed in a standard formula. So that the potassium hydroxide would be a constant, a solution of definite concentration was made up and equal volumetric quantities were used in each of the four batches. No perfume was used so that differences in odor were observable.

The creams were even more dissimilar than had four trade-marked commercial jars been lined up, in both consistency and appearance. They varied from too soft for use and with a metallic lustre to a dull viscous mass. The odor varied from negligible to almost distasteful.

In published formulae the alkali figures are often indefinite, sometimes even written as so many degrees Baume, whereas they should be written as one hundred per cent material. The actual amount of alkali is very important since the consistency is dependent upon the amount of stearate soap and the excess of stearic acid unacted upon. In all work, the alkali should be analyzed with accuracy to the hundredth of a per cent.

Shaving Cream

This leads to shaving cream, the making of which is also quite an art. The remarks about the stearic acid and alkali above are equally applicable. The cream is made more nearly neutral so there is even less tolerance in the quantity of alkali. Since usually both sodium and potassium hydroxide are incorporated, the chance for error is doubled. The ratio of potash to soda is also quite important as is the percentage of glycerine and free fatty acid left in the product.

Manipulation is very important. Since oils and/or fats that are relatively difficult to saponify as well as stearic acid which reacts on contact with alkali are present, all, or at least part of the stearic should be withheld until the reaction has gone to completion. Only by this procedure is one sure the free oil or acid is present as stearic acid and any other uncombined oil is susceptible to discoloration and the development of rancidity.

Here, too, the finished product should be analyzed for free fatty acid and yet many undertake to make shaving cream with neither the skill nor the facilities for doing so. Even assuming that a cream is correctly made with the ingredients approximating those anticipated by the author of the formula, no conclusion can be drawn at once. The cream should be allowed to "age," "rot" or "cure" as it is variously termed, over a period of days with occasional agitation before passing judgment.

In cream experiments the manipulation is quite important. A mixing temperature may be too high or too

low, the agitation may be too vigorous or too slow, it may be continued too long or not long enough.

Tooth Paste

For convenience the tooth pastes are divided into two classes—namely—the alkaline and the acid, the former being discussed first. The most frequently named abrasive is precipitated chalk—sometimes being qualified as light and only occasionally heavy or quantities of both are specified. The absorption of excipient for the various chalks varies between very wide limits. The given formula may produce a thin paste almost soupy after milling with low absorption chalk and one almost like concrete with another chalk that is highly absorptive. Obviously the ratio of abrasive to excipient must be adjusted up or down or else more or less gum or starch paste must be employed.

This brings up the matter of gum tragacanth which varies widely in jelly strength. Likewise, there are relatively thin and thick boiling starches which may throw the consistency way off. If the figure of either is lowered too far it may permit double decomposition between the soap and chalk with a slow but certain gradual hardening of the paste in the tube. This is deadly disastrous marketwise.

Powdered soap, pulverized neutral soap or whatever other designation that may be given the soap, it is by no means a definite chemical compound. At the lower extreme is castile soap with a titre from 18.2 to 21.0° Centigrade with various other soaps of higher titres offered tooth paste users. The highest titre ordinarily offered for tooth paste that has come under observation is a brand that varies from 36.1 to 37.5 degrees Centigrade in various lots. The soap is added as a powder but before the processing is completed or certainly after ageing, the soap is present as a paste. This is probably true even where no water enters into the formulation because the glycerin and the glucose, if present, each contain water. Certainly the former soap forms a softer paste, or jell, than the latter.

Another variable is glucose which if employed is available in three, call them concentrations. These are 42 degree with 21.5%; 43 degree with 19% and 45 degrees with 15 per cent water. There is a marked difference in consistency, the first being quite firm, almost rigid and the last free flowing.

The flavor oils all tend to soften the paste, some appreciably more than others. Still another variable is the quantity used and many formulas are written "Flavor q.s." leav-

(Continued on page 109)



by
DONALD S.
COWLING

THE GOOSE RETURNS

Did you notice the demand for sets this past holiday season? Seemed like old times to observe the puffed and furbelowed boxes on display in such profusion, and from all we have been able to gather from buyers recovering their breath after the rush, few were shipped back.

Actually there's no reason why sets shouldn't make up a substantial portion of the holiday business of any store. No reason, that is, aside from the disfavor into which sets fell a few years ago when buyers, acting on orders from above, forgot everything but stock reduction. When the frantic buyer, with threats and pleadings from the office ringing in his ears, fell savagely upon his stock sheets to see where he could cut down his inventory, sets loomed large, and by reason of such prominence, were first to go. Too, certain manufacturers, permitting design to become the better part of discretion, had begun to run a good thing into the ground by making their set boxes so expensive as to burden unjustifiably an otherwise normal toilet goods inventory. These containers, naturally, were the first to catch the harried buyer's eye. Unsalable in themselves, they yet sat smugly on the stockroom shelves, tying up by their ornate presence certain portions of the appropriation which should have been turning over merrily in the form of creams, powders, and sundry other staples. The items enclosed in the boxes, removed therefrom, were almost invariably unsalable due to the lack of individual containers.

Now that that phase of merchandising is past and sets are once more beginning to make their presence acknowledged is a good time to determine upon a more sound policy regarding them. One firm, this past holiday season, sent out to its accounts various sized boxes with the firm name and insignia imprinted in gold, and filled with stripped packing paper. The idea was that the stores could, with these boxes, make up their own sets, and thus avail themselves of the advantages of multiple unit sales without tying up any portion of the appropriation in merchandise not readily liquid.

While far from ideal, this move looks very much like a step in the right direction. More will come of it. We'd like to see sets back again. There's a gifty atmosphere about a container with several items that is difficult to achieve with one bottle of perfume, no matter how beautiful, and the giftier the atmosphere around the toilet goods counter at holiday time the jollier for all concerned.

Something happened to the goose before, but now with larger eggs of a higher carat in view it behooves us all to be more careful. Somebody's going to hit on the right way, and then we'll all fall in line as usual to the betterment of all concerned.

New Packages

by Mary L. Goodman



★ **SPECIAL RECOGNITION**

Helena Rubinstein calls this jar her "Beauty Foursome" and it is indeed very appropriately named. It is of ivory "Bakelite," five inches high, and contains a whole beauty treatment, consisting of cleansing cream, night cream, face powder and cream rouge, in four compartments that are built into a sleek column. Directions are printed in red directly on the container, which is compact and light, making an ideal traveling accessory. This item is sold with a gaily printed linen kerchief in which it is knotted, and which can also be used as a head band.



1



2



3



4

1. GASTON DE PARIS: New nourishing cream recommended for dry skin, available in three sizes. White opal jar with blue lettering and blue metal screw cap.

2. CORDAY: This attractive new "Orchidee Bleue" eau de cologne bottle harmonizes with the packages of the perfume, dusting powder and face powder of this popular fragrance.

3. HOUSE OF WEMBDON: This festive Easter package is filled with soap, cologne, sachet in bags, and water softener in tablets and bags from the company's regular line.

4. LA CROSS: Coronation shades (red and white) are emphasized in this hand lotion package. The gold screw cap is another touch of Coronation styling.

5. MYRURGIA: In the midst of the present troubles in Spain, comes this striking "Maja" perfume bottle. Especially noticeable is the exaggerated and top-heavy stopper, surmounting a fine-moulded bottle.



5



6

GARDNER: "Veet" is a new dry shampoo in powder form, which the company claims may be used on any type of hair. No soap or water are necessary and the shampoo takes but a few moments. It is packaged in a white cardboard container with blue border and lettering, and has a metal base and top, with spout opening.



7

LENTHERIC: The latest addition to this company's extensive line is a "Sports Cream" to be used as a protection against chapping, sun or wind burn. It is available in tube and jar and both sizes are in white containers with black lettering. Figures in various sport attitudes are outlined in green on the background. The tube is equipped with the popular "No-Kap" closure.



8

ROSE LAIRD: This manufacturer has added a new hand cream to her treatment line, which is undoubtedly a wise addition. The market for these preparations is rapidly broadening, and a hand preparation is now becoming as important to a women as her facial creams. The Laird cream is a greaseless, faintly scented product, which may be used during the day or night. It is packaged in a white opal jar with white metal cap, and white and green label. A little booklet, pasted on the back, gives a brief description of this cream and other items offered by the company.



9

ST. DENIS: This company has just created a facial treatment line consisting of four liquid creams, "Hand and Body Balm," "Facial Bath," "Toning Lotion" and "Retexture Balm." They are in the popular price range, and are simply packaged in tall hexagonal bottles with white molded caps, covered with cellophane. I particularly like the labels which carry a brief description of the product printed in italics. This is very helpful for it immediately identifies the use of the product with its name. An additional label is pasted on the bottom of the bottle giving complete directions for use.



10

LAMBERT PHARMACAL CO.: "Listerine Antiseptic", so long associated with a cork closure and small corkscrew, has now adopted a black molded cap which the manufacturers feel adds convenience to the product and makes it more modern and attractive in appearance. Containers and closures by Owens-Illinois Glass Co.



11

RICHARD HUDNUT: Eye cream recommended to soften lines and wrinkles around the eyes. Opal jar with rose metal screw cap.



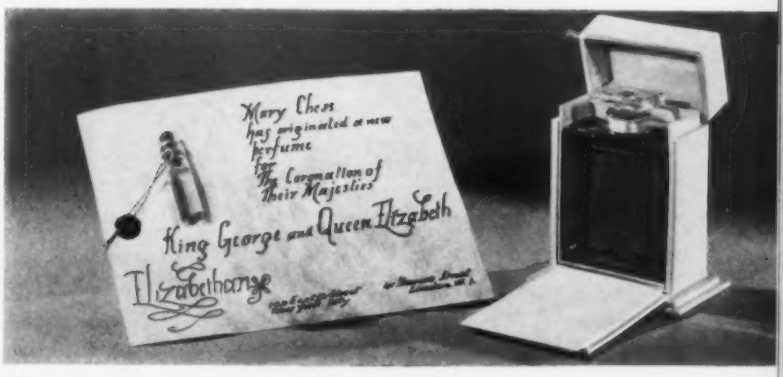
12

GABILLA: A new Eau de Cologne, scented with the popular Gabilla perfume odors, is now being offered in three sizes. All the sizes are similarly packaged in tall, many-faceted bottles with highly-polished brass screw caps. The label is in blue and white, with blue lettering.



13

BOURJOIS: For Easter this company is offering a two-dram bottle of "Evening in Paris" perfume in a little basket of deep blue "Bakelite" tied with white satin ribbon. The carton is equally gay and festive, the cover having a full color drawing by Jane Miller against an over-all pattern on a dark blue background.



14

MARY CHESS: "Elizabethan" perfume, a modern deep-tone odor, dedicated to Queen Elizabeth of Great Britain. Introductory sample vials are attached to a square card on which is written the full story of the perfume.



15

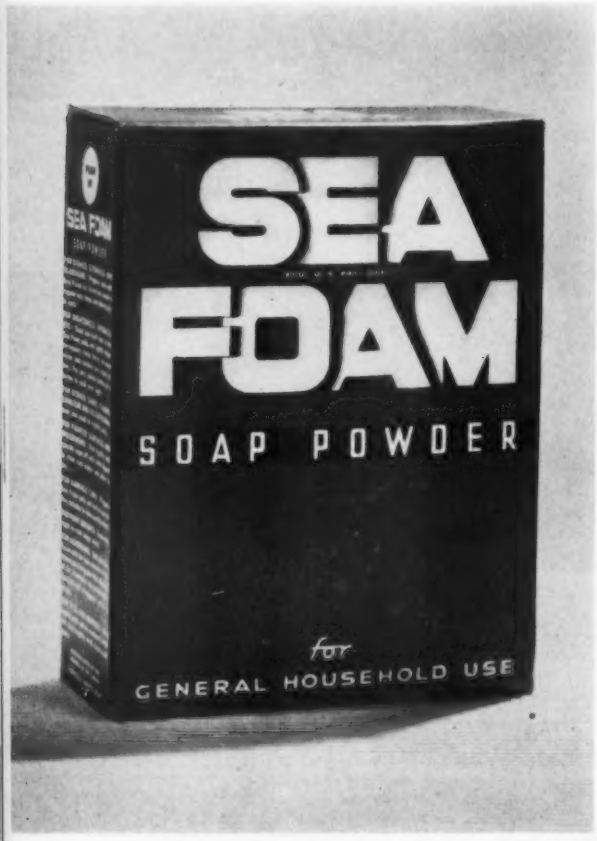
ELMO: Special introductory set for the company's "Special Formula" cream consists of a tube of the cream, with "No-Kap" closure, and face powder, rouge, lipstick and cosmetique, all in special sizes.

16

SPOONER: This company is featuring bath oil in pine, lavender and gardenia odors, harmoniously packaged to correspond to the odor of the oil. The bottles are encased in a cardboard jacket on which is pasted a colored, artificial flower, to identify the scent, and the entire box is covered with transparent paper.

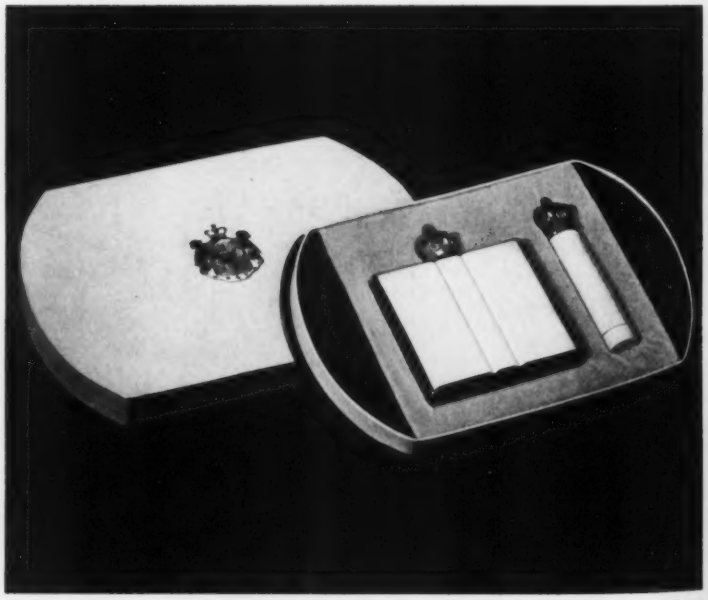


WOLF AWARDS precede PACKAGING SHOW

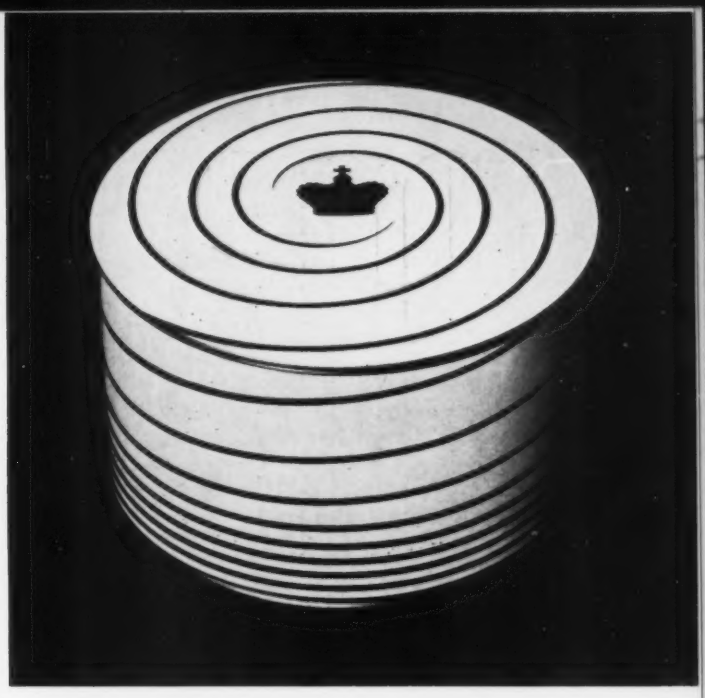












THE annual Irwin D. Wolf Awards Competition for distinctive merit in packaging was won this year by a cosmetic group, "Adrienne" cosmetics, manufactured by the United Drug Co., Boston. This beautiful line was designed by Gustav Jensen and its merit was first recognized in May, 1936 in a special article by Ruth Hooper Larisson in *The American Perfumer*. Mr. Jensen also designed the new cover which has appeared on this magazine since last November.

Cosmetic and toilet goods houses fared well in this year's awards. In addition to the grand prize, a photograph of which is used as the frontispiece for this issue (Page 46), other prizes were won as follows:

For the most effective use of typography and/or lettering: "Sea Foam" soap powder, entered and used by Colgate-Palmolive-Peet Co., designed by Simon de Vaulchier; honorable mention in this class to "Twilight Garden" toilet soap, entered by Martin F. Schultes, used by Hewitt Soap Co., designed by J. Probasco.

For the most effective use of elements of design to create shelf visibility in the retail stores: Honorable mention to "Sea Foam" soap powder.

For the most effective package designed to add to consumer convenience regardless of artistic qualities: Honorable mention to "Honey and Almond Cream," entered and used by Lehn & Fink Products Corp., designed by Scovill Manufacturing Co.

For the most effective packaging of a combination sales unit: "Sceptre" compact and lipstick, entered used and designed by Prince Matchabelli Products Corp. Honorable mention in this class to the manicure ensemble, entered by Beetle Products Division of American Cyanamid Co., used by Coty, Inc., designed by Coty, Inc., and Colt's Patent Fire Arms Mfg. Co.

For the most effective use of layout and/or decorative design with particular emphasis on both merchandising value and beauty: Honorable mention to "Prince Matchabelli" dusting powder, entered by Owens-Illinois Can Co., used by Prince Matchabelli Perfumery Co.

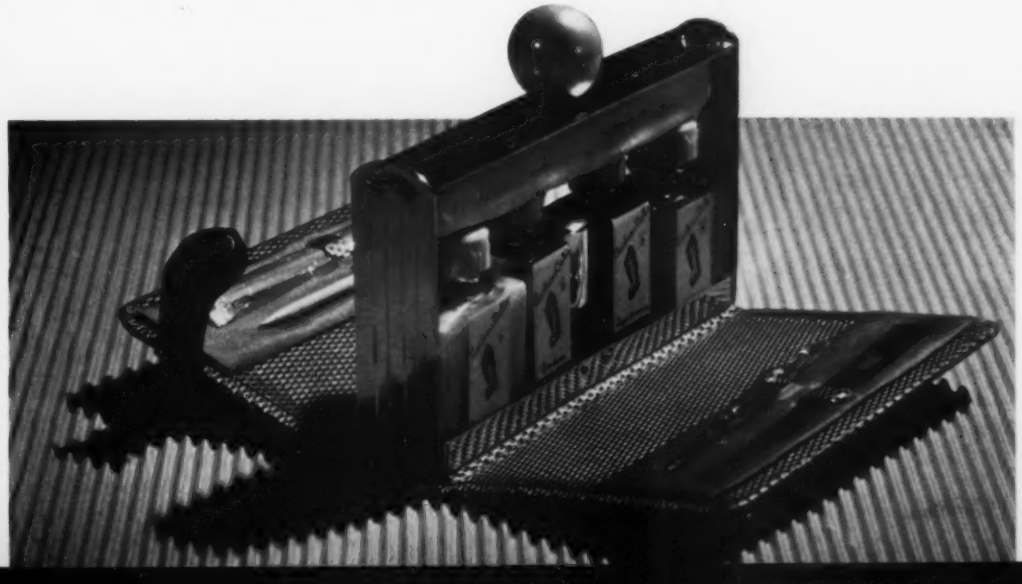
For most effective use of inventive genius in package construction: "Coronation" manicure set, entered and used by Barbara Bates, designed by Stuart S. Joslyn.

For the most effective family of packages: "Adrienne" cosmetics winner of the Wolf Trophy.

These and the other winning packages will be on display at the Seventh Packaging Packing and Shipping Conference at the Hotel Pennsylvania, March 23 to 26. The convention is under the direction of the American Management Association.

In addition to booths by leading manufacturers of packages and materials, an excellent program of conferences, clinics and discussions has been arranged. The first day's sessions will be devoted to concurrent sessions on packaging materials and bulk packaging. Concurrent sessions on packaging machinery and on packing and shipping will feature the second day.

On the opening day of the Conference, the Wolf awards will be presented at a luncheon session.



news & events

Jéquier Here for Annual Visit

W. D. V. Jéquier, executive director of Parfums Weil, Paris, has returned home after a visit of several weeks in America. Most of his time was spent at the New York offices of the affiliate company, Parfums Weil, Inc., where conferences resulted in perfecting plans for broader distribution and sale of the line in America and for the addition of some new numbers to the line.



Mr. Jéquier

Mr. Jéquier expressed surprise at the tremendous improvement in business since his visit of a year ago and is optimistic regarding conditions here as well as in other countries where his fine line of perfumes is enjoying a rapidly growing sale.

Bennett Addresses Drug Trade Dinner

With more than 2,000 in attendance the annual Drug Trade Dinner of the Drug, Chemical and Allied Trades Section of the New York Board of Trade, March 4, was a complete success. The grand ballroom of the Waldorf-Astoria in New York was crowded to capacity to take care of the huge throng of drug and cosmetic personalities from all parts of the country who attended the dinner. New York State's Attorney General John J. Bennett, Jr., made the principal address of the evening. He was presented by A. Kiefer Mayer, of Kiefer Stewart Drug Co., former N.W.D.A. president, who acted as toastmaster. Mr. Mayer was introduced by Joseph A. Huisking, chairman of the section. The reception and get-together before the dinner was a complete success, thanks to the activities of the entertainment committee and too much credit cannot be given to Ray Schlotterer, secretary of the section and Miss Helen Booth, his competent assistant, for the success of the dinner. It has become the one outstanding drug trade event of the year.

Arthur F. Danz Joins Kirkman

Arthur F. Danz, who recently resigned from his position as manager of the industrial division of the Colgate-Palmolive-Peet Co., has been appointed vice-president and general manager of Kirkman & Son Inc., soap manufacturers, which this year celebrates its 100 anniversary.



Mr. Danz

Mr. Danz has been connected with the soap business for the past twenty-eight years, both as manufacturing and sales executive. During these years of association he became well known in the Middle West and on the Pacific coast, as well as in the eastern section. He will make his headquarters at the Brooklyn, N. Y. offices of the company.

New Sales Representative for Parfums d'Orsay

Parfums d'Orsay, New York, has appointed sales representatives for various territories as follows: Western—John B. Palmer; Middle Western—Waldemar Lossow; Southern—Gaile Wolfe; New England—Normand Godbout; Middle Eastern—Raymond Gregoire. Patrick Meyers and Harry Zweiger will continue to represent d'Orsay in metropolitan New York and Philadelphia.

Beryl Blake Now with Quinlan

Miss Beryl Blake has been appointed directress of the Kathleen Mary Quinlan salon in New York to succeed Miss Virginia Huff, who recently resigned. In addition to her other duties, Miss Blake will also be in charge of publicity for the company's products, and in general, her new activities will include many of the responsibilities which were formerly attended to by Miss Quinlan when she herself was active in the business. Miss Blake comes to the Quinlan organization with a broad educational and business background, which peculiarly well qualifies her for her new position.



Miss Blake

Neilson Kennedy Now with G. H. Wood & Co.

Jack Neilson Kennedy, son of J. R. Kennedy, president of United Drug Co., Ltd., Toronto, is now associated with G. H. Wood & Co., sanitary chemists of Toronto. Young Mr. Kennedy recently completed four years at St. Andrew's college. With his father and mother he will sail early in May for London where they will attend the coronation ceremonies and also the Silver Jubilee convention of the United Drug Co., of England. Holland, France, Germany, Czechoslovakia and probably Italy will also be included in their itinerary.

Tax Repeal Discussed by Beauty Editors

A series of luncheons for discussion and possible action on repeal of the excise tax on cosmetics has been held in New York during the last month. Beauty editors of the prominent national magazines have taken an active part in the campaign for repeal and the support of women's clubs has also been enlisted. Mrs. William Dick Sporburg chairman of the legislative committee of the General Federation of Women's Clubs, attended one of the meetings and her support and that of her organization have been secured for the repeal movement. It is expected that action by women in all parts of the country to bring pressure to bear upon Congress will follow these meetings.

The tax will probably come up for consideration during the latter part of March. By that time, it is hoped that considerable public sentiment against its retention will have been aroused.

Texas Soap Company Expanding Plant

The Texas Soap Manufacturing Co., Houston, is expanding its facilities for the manufacture of powdered soap by erection of a new building and a tower. The work, when completed, will permit expansion of the company's production of powdered soap from present capacity of 5,000 pounds to 25,000 pounds per day. J. W. Sertwelle is president and T. D. Harral, general manager of the company.

Californial Suppliers Entertain Association

About two hundred and twenty-five persons of toilet goods persuasion ambled over to the Elks Club in Los Angeles, Wednesday evening, February 10 to learn. They learned there just how important a part in the welfare and conduct of the cosmetic industry is played by the suppliers of materials—the associate members of the California Cosmetic Association. The associate members took the meeting over, making this particular meeting the fourth annual. Booths on which were displayed the products of the various exhibitors ringed the room and before and after dinner members of the association filed interestedly along the display.



Mr. Norman

Prizes awarded by a committee composed of Mr. Willats, Mr. Overton and Capt. Balsley were won by: 1st—Albert Albek, Inc., 2nd—Pacific Label Co., 3rd—Mefford Chemical Co.

Door prizes were supplied in profusion and much entertainment had been provided by the committee in charge, headed by Alex. Barnes of Glass Containers, who acted as chairman for the evening, and F. C. Stolle Associated Oil, master of ceremonies.

President Norman of the association headed the nearly unanimous turnout of members, and thanked the associate members most sincerely in behalf of the association. Those having displays were:

Albert Albek, Inc., Allied Advertising Artists, Associated Oil Co., Braun Corp., L. H. Butcher Co., Florasynth Laboratories, The Foxon Co., Fritzsche Brothers, Glass Containers, Givaudan-Delawanna, Maurice Carasso, Mefford Chemical, Midas Bureau, Merck & Co., Owens-Illinois Can Co., Pacific Label Co., E. C. Pierce Co., Pfaltz & Bauer, W. C. Ritchie, E. N. Rowell Co., Scovill Manufacturing Co., I. F. Schnier Co., Walton B. Crane & Associates, Western Label Co.

Other firms listed among the associate members of the California Cosmetic Association are:

Baldwin & Baldwin, Eureka Press, George Lueders & Co., Hazel-Atlas Glass Co., Independent Paper Box Co., H. Kolnstamm Co., Emulsion Products, Owens-Illinois Pacific Co., L. Sonneborn & Sons, Van Dyk & Co., and Union Oil of California.

Photograph of many of the displays will be found on pages 64 and 65.



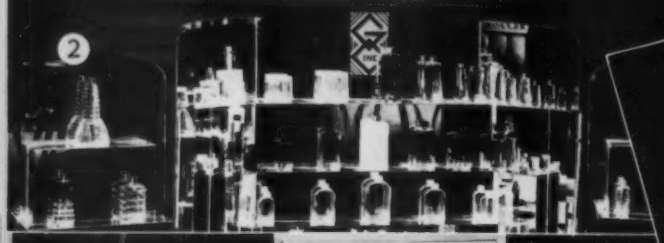
Associate Members' Dinner of California Cosmetic Association

CALIFORNIA COSMETIC ASSOCIATION



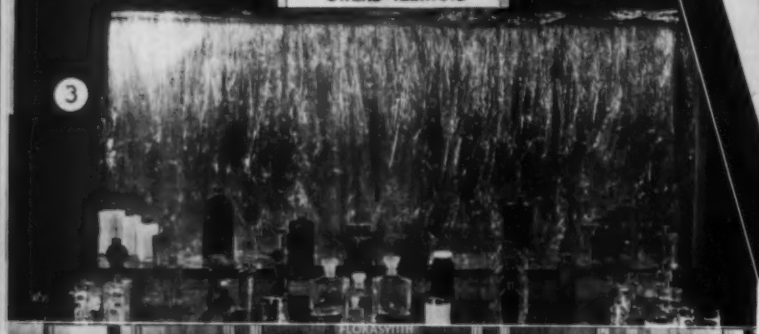
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GLASS CONTAINERS INC.



2

E. C. PIERCE & CO.
GENERAL LINE JOBBERS
OWENS ILLINOIS



3



4



MERCK & COMPANY
MANUFACTURING CHEMISTS

5



6

WESTERN LABEL CO.
LOS ANGELES



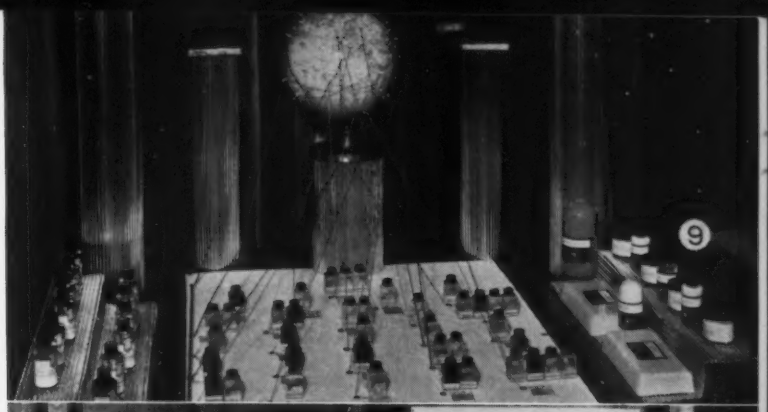
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BEN COTTLE
GIVAUDAN-DELAWANNA INC.
5410 WILSHIRE BLVD.



1. R. G. Byington
2. Glass Containers, Inc.
3. E. C. Pierce & Co.
4. Florasynth Laboratories, Inc.
5. Merck & Co.
6. Western Label Co.
7. Givaudan-Delawanna, Inc.

8. Emulsion Products Co., Inc.
9. Albert Albek, Inc.
10. L. H. Butcher Co.
11. Scovill Manufacturing Co.
12. C. H. E. Dunn
13. Mefford Chemical Co.



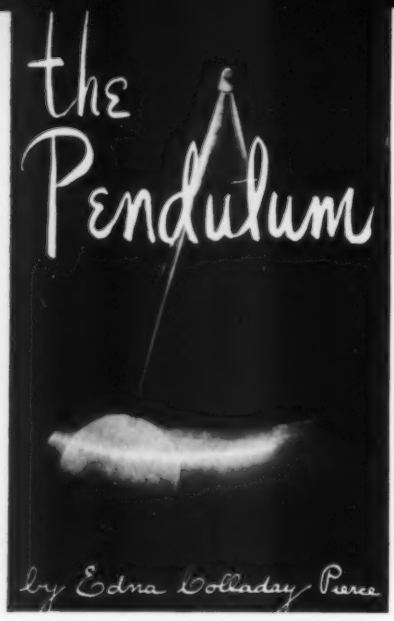












STYLE TRENDS

THERE are several important trends indicated as the style pendulum continues to swing toward Spring.

Suits—two or three to a wardrobe—are varied with dresses and full-length coats, some of them lined with the fabric of the frock worn beneath it. Most of the dresses are flowered prints, with plain coats. Suits are of three colors, for the most part—York gray, the perennial navy, and black. And soft pastel shades—particularly many shades of rose—will also have their day in the sun. Beige continues to be high fashion, and light-weight woolens, feather-weight, really, soft and smooth, are to be in great favor.

Among the fabrics used, there are kasha, mohair, camel's hair, wool-crepe, Jerseys—particularly the very dull finish Jersey which Chanel uses—and for especially smart wear there is broadcloth Jersey, as sleek and velvety as antelope. Capes, too, to match suit and dress fabrics, are going to be worn, and these are particularly becoming to the type of figure not distinguished for slender svelteness. Dress shoulders return to normal; the fitted bodice is often draped; sleeves are simple, varying from very short to full length ones.

The part of the costume to be dramatized this coming season is skirts! They are of a Gipsyish fullness, minimizing the effect of the bodice. This version, either restrained or extreme, appears in practically every corture house opening. Particularly are Rochas, Sciaparelli, Mainboucher and Patou showing this romantic full skirt on cocktail dresses.

Molyneux emphasizes the waistline by placing a corsage of zinnias, hyacinths or blue-bells there. The romantic tendency is observed, also, in accessories, hats, veils and shoes. Flowing black veils drape afternoon hats, and shoes come in such colors as blue, red, green and purple.

Stripes, horizontal or vertical, are featured by many houses for evening. Vivid tropical colors in costume contrasts are high-lighted and are the influence of the artist's palette is noticeable in models of Molyneux, who has adopted the colors made famous by Gauguin, and by Schiaparelli, who has launched Seine sunset reds. Hyacinth and yellow will probably become important accent colors, also "watermelon" pink. Lelong and other designers combine two, three, or more vivid colors in evening frocks.

Embroidery is extremely important in all collections. Because of the Coronation, elaborate silver and gold embroidery will be prominent, and lace will continue to be a prime favorite, along with the popular sheers, among which nun's veiling has taken its place, along with silver clips on the hems of skirts. Many of the embroideries are flowered.

Alix, since her return from Egypt, has been combining her great gift for superlative draping which molds the body so slimly and amazingly, with circular skirt fullness.

Now, what does all this mean to the manufacturer of toilet goods? First, here are the colors to which to key your cosmetics. Second, promote your floral perfumes. Third, Egyptian, romantic and the modern painters, as well as older and better known ones, will influence couturiers; then too, there is the Surrealist movement. All these are tips for your promotions.

This coming season will be one which should be capitalized upon in so *many* ways by manufacturers and stores, for there will be feminine allure, plus the gorgeousness of the Coronation, and so, as has been true for some time past, British influence is with us.

SEEN IN THE STORES

We have been browsing around the stores recently, and most of them are turning their toilet goods departments and their windows into veritable flower-gardens. Some of these are especially noteworthy.

Wanamaker's, for instance, in their island in the centre of their new and beautiful department, have shadow-boxes in their show-cases, which house respectively jonquils, hyacinths, narcissus, iris, tulips and apple-blossoms, and the effect is as though these flowers were living ones which grew in their natural habitat.



Easter Bunnies made of flowers, sitting up on a grass mat, against a background of white iris, carnations, tulips, delphinium, sweet peas, rhododendron and flowering peach, interspersed with Norway spruce hung with tree moss, formed the theme for this window display of J. W. Robinson's in Los Angeles.

Elsewhere throughout the store there are many little flower-carts, atop columns, filled with flowers of all shades and varieties.

Every year, as Spring approaches, Franklin & Simon specializes in flower-carts, heaped with boutonnieres of such nostalgic realism, that few women can resist them. We photographed one of these for this department a year ago.

Bonwit Teller windows now achieve amazing and beautiful fantasy. Imagination is the keynote of these lovely windows. One that harmonized perfectly with the exquisite products of Mary Chess, was recently seen there. Another of irridescent glass bubbles, which circled round a recumbent cellophane figure of a woman, epitomized Helena Rubinstein's "Pasteurized Milk Bath," and was the most beautiful toilet goods window we have ever seen. Another in the same store was filled with bamboo steps that led up to a temple depicted by a centre panel, and up the steps, at irregular intervals, climbed the coolie topped bottles of Weil's "Bamboo" perfume.

The creator of all these lovely window-displays, including the Surrealist lipstick one, is Helen Coles. Here at Bonwit Teller's she has complete freedom to express beauty in terms of originality and artistry. That the windows sell merchandise is an indisputable fact, as Miss Sally Wiel, the toilet goods buyer will tell you. Here is an example of what coordination can do in the way of sales promotion, in a store which is definitely conscious of feminine reactions. Probably one logical reason for this is the fact that the store has a woman president, who directs its policies unhampered by masculine restrictions.

QUESTION BOX

The Question Box acts as a clearing house to help you solve your merchandising and sales promotion problems. Send us your own questions. We shall be glad to answer them and shall not reveal your name, so that you may be quite frank and so shall we.

Q. When a buyer in an important store refuses to stock a new product of tested merit, is there any way to get the product in that store?

A. There are several ways to make a product desirable from a buyer's point of view. The surest way is to see to it that a demand is created previous to presentation, or immediately afterward, if you have already seen the buyer. Charge customers of the store may be circularized or contacted directly and informed about the product. The WAY this is done means its success or failure, of course, as this is a sure way of creating a nucleus of customer desire for the product. You may be sure that if enough people go to a store asking for a product, the buyer will yield to that kind of logical pressure. He or she is certainly not going to turn away business, for the chances are that the same consumers have charge accounts at *other* stores than his own. There *are* buyers, however, who have vision enough to see the potentialities involved *in* a new product, and to create a demand *for* that product in their own cannily managed departments. Such buyers almost invariably have original ideas for promotion, founded upon long and successful experience. Consult some one familiar with these various elements, before you risk trying any more experiments. And do not become discouraged too soon, because the stores you selected do not fall in line at once. Organized publicity; cooperative newspaper in lieu of national advertising; promotion methods that move merchandise from shelves already stocked, are all definite steps toward achieving the goal you have set for your product.



A famous Detroit store, J. L. Hudson's displays perfume at Easter by filling a window with lovely flowers. Two jardineres filled with Easter lillies, vases of iris and tulips, and pots of growing roses, form a most effective and feminine back-ground for delicate, golden fragrance and create a cheerful spring-like atmosphere.

SELLING HINTS

In this year of the romantic trend in women's gowns, there is a tendency to reflect on the indubitable fact that the great couturiers are influenced by very human qualities in designing.

We may say that sentiment has a small place in the world of affairs and the marts of modern business, nevertheless deeply felt emotion holds in abeyance the flights of imagination, which are the mainspring around which business revolves. Behind every conception of a sound and profitable idea is imagination! Without it the world would be a dreary place indeed. Every perfume manufacturer knows that the success of his line depends upon the romance and glamour with which he can invest his product—that it may set free the imaginations of the women who buy them. Perfume is the product of imagination; the creative imagination of the chemist; the myriad names given it; the beautiful containers which house it; the advertising and publicity it receives; the images it evokes in the minds of the ultimate users.

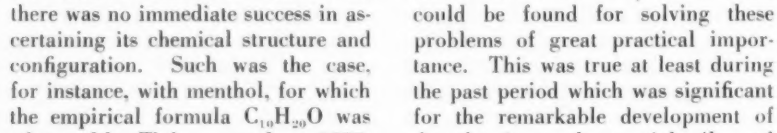
Use *your* imagination in promotions and thus make the consistent chain bring you definite rewards.

Citronellal and Hydroxycitronellal

DR. K. BOURNOT of the research staff of *Schimmel & Co.*, discusses the chemical structures and relationship of citronellal and hydroxycitronellal and describes their uses in perfumery.

IT has frequently been observed in the chemical history of perfume materials that an important aromatic has been discovered in and isolated from an essential oil, but that while the empirical molecular formula could be arrived at, there was no immediate success in ascertaining its chemical structure and configuration. Such was the case, for instance, with menthol, for which the empirical formula $C_{10}H_{20}O$ was advanced by *Walter* as early as 1838, whereas its structure was ascertained only after 1892. Similarly, muscone $C_{16}H_{30}O$ was isolated in 1906 by *Walbaum* from the volatile oil of musk seed and analyzed, whereas it was not until 1926 that *Ruzicka* and his collaborators succeeded in revealing the structure of this ketone in their publications on high-membered carbon rings. Likewise, jasmone $C_{11}H_{16}O$, extracted in 1899 by *Hesse* from jasmin flower oil, has only quite recently been recognized, by *Treff* and *Werner* on the one hand, and by *Ruzicka* and *Pfeiffer* on the other, as a methyl pentenyl *cyclo*pentenone. It is, therefore, still a long way from the discovery of a natural isolate to the complete revelation of its chemical structure and its actual synthesis. This is explained by the fact that completely new theoretical knowledge had to be obtained in every case by laborious scientific research before new ways and means could be found for solving these problems of great practical importance. This was true at least during the past period which was significant for the remarkable development of the chemistry of essential oils and aromatics.

This is also true of citronellal isolated from citronella oil by fractional distillation, first in 1872 by *Gladstone* and in 1875 by *Wright*, and formulated correctly as $C_{10}H_{18}O$. After *Kremers* had succeeded in 1887 in separating this compound from citronella oil by means of alkali bisulfite and found it to be an aldehyde, Schimmel & Co., in 1888 isolated the aldehyde from the oil of *Eucalyptus maculata* var. *citriodora* and termed it "citronellone." *Dodge*, in 1889, examined his citronella aldehyde extracted from citronella oil with bisulfite and confirmed the correct empiric formula $C_{10}H_{18}O$. Subsequent investigations by *Semmler*, *Tiemann*, *Schmidt*, and others in 1896 based on the study of the oxidation products of citronellal (β-methyl adipic acid and acetone) established the following structural formula (terpinolenic form):



This work, however, did not imply any finality in the research on the structure of citronellal. Within a few years *Harries* and *Himmelmann*, who worked on the behavior of citronellal and its derivatives toward ozone, concluded that citronellal contains, in addition to the terpinolenic form found in the first place, a limonenic form:



Citronella Oil Factory in Java

This opinion was subsequently sustained by *Grignard* and *Doeuvre*[1] who by means of quantitative ozonization arrived at the conclusion that pure *d*-citronellal from Java citronella oil was a mixture of 25% limonenic and 75% terpinolenic citronellal. Very recently however, *Doeuvre*[2] found this to be erroneous, as his original ozonization process was not conclusive. This process consisted in treating a solution of citronellal in pyridine with ozone, hydrolyzing the resulting ozonide, and determining quantitatively the decomposition products originating from the methylene group: carbon dioxide, formaldehyde, and formic acid. In this reaction, however, enolization is likely to take place and carbon dioxide may be formed not only from the methylene group but also by oxidative side reactions, thus giving rise to erroneous conclusions. To eliminate this error, *Doeuvre* proceeded recently as follows:

A dilute solution of the semicarbazone of citronellal in ethyl acetate and acetic acid is subjected, at low temperature (–15 to 20°), to ozone treatment, and the ozonide formed is not hydrolyzed but is immediately reduced with sulfur dioxide. Enolization and also formation of the carbon dioxide due to additional oxidation are hereby avoided. By the same process citronellol obtained by reduction of citronellal was examined. In both cases *Doeuvre* found that practically no methylene group was present, proving that citronellal from citronella oil consists exclusively of the terpinolenic modification. This result tallies with the findings of *Naves*, *Brus*, and *Allard*[3] who, prior to *Doeuvre*, also had proved the absence of the limonenic form in citronellal by determining the Raman spectra.

Of other recent publications on citronellal, those dealing with the quantitative estimation of citronellal in essential oils are of special interest. The percentage of citronellal is of great importance in valuing certain essential oils, especially citronella oils. As the older methods for determining the citronellal content showed various drawbacks, the perfection of a method precise beyond the possibility of error, such as the hydroxylamine method (cold) was of great importance to the essential oil and aromatic industry. This process[4] is of particular value since it



Women bring the cut citronella grass to the factory.

can also be used for the determination of almost all aldehydes and ketones contained in essential oils. True, the variety of these compounds necessitates in each case a modification of the process, as pointed out by Schimmel & Co., in 1929[5]. This method's chief feature is the formation of the corresponding aldoximes or ketoximes by treatment with hydroxylamine hydrochloride and the titrimetrical determination of the liberated hydrogen chloride.

Citronellal has been found in the dextrarotatory form in Ceylon citronella oil (5 to 18%), Java citronella oil (25 to 54%), the oil from *Eucalyptus maculata* var. *citridora* (49 to 68%), and also in melissa, lemon, and lemongrass oils. Laevorotatory citronellal was detected by Schimmel & Co., in "Java lemon olie." For the production of citronellal, citronella oil or oil *Eucalyptus* citriodora are used. The aldehyde is isolated by preparing the crystallized bisulfite compound and is liberated therefrom by alkali carbonate. As citronellal is very sensitive toward alkalies and acids and readily forms *iso*pulegol in the presence of acids with cyclization, citronellal purified by the bisulfite method as customary in the industry usually contains *iso*pulegol. Synthetically, citronellal may be obtained by oxidizing citronellol with chromic acid, or (in the inactive modification) by hydrogenating citral in the presence of palladium.

Having an odor of lemon and melissa, citronellal is widely used in perfumery, particularly for scenting soaps. It is also used as an intermediate in the production of aromatics, for instance in the manufacture of citronellol, obtained by reducing citronellal with aluminum amalgam in an alcoholic solution slightly acidified with acetic acid.

Of much greater importance in perfumery, however, is hydroxycitronellal, a derivative of citronellal used as early as 1905 in compositions and later sold under a variety of names. It has only been used during the last ten years under its correct chemical designation.

Hydroxycitronellal has the following structural formula:

$C_{10}H_{20}O_2$, or $(CH_3)_2$:C (OH). CH_2. CH_2. CH_2. CH (CH_3). CH_2. CHO.

It therefore differs from citronellal chemically merely by an additional content of one molecule of HOH. It is remarkable that with this addition of H and OH to the double bond of citronellal, the lemon-like character of the aldehyde changes to an extraordinarily pleasant flowery odor of a lily-of-the-valley type and the result is an aromatic of the greatest importance in the perfume industry. This is probably due to the fact that by introducing the H and OH groups the pure aldehyde note of the original unsaturated aldehyde is changed and the result is an aromatic chemical forming at the same time a saturated aldehyde and a tertiary alcohol.

Because of the sensitiveness of citronellal it is necessary in the production of hydroxycitronellal to bind the aldehyde group temporarily, for instance, with sodium bisulfite, prior to adding H.OH. to the double bond. After this addition the aldehyde is again liberated. Different methods may be used. According to *Verley*[6], it is, for instance, possible to obtain the sulfate of hydroxycitronellal by treating the bisulfite compound of citronellal, at –20°, with concentrated sulfuric acid and to transform the sulfate into hydroxycitronellal by treatment with water and subsequently with sodium carbonate. The aldehyde obtained by this or similar methods usually still contains *iso*pulegol and other impurities and must be purified by careful distillation with steam and rectification in a vacuum. The production of hydroxycitronellal presents some technical difficulties. The purification of this compound—sensitive even toward dilute acids and alkalis—is not

easy, and the pure aldehyde itself oxidizes easily. It is therefore readily understandable that the different products found on the market vary widely in purity and quality of odor.

Apart from testing the odor, the purity is ascertained, *inter alia*, by the solubility of the preparation in a 10% sodium bisulfite solution. Ten drops of hydroxycitronellal must be clearly soluble when warmed and shaken in 3 ccm of a freshly prepared solution of 10 parts of dry sodium bisulfite in 90 parts of distilled water. Flakes or oily drops indicate impurities. Satisfactory qualities of hydroxycitronellal show the following constants: d_{15}° 0.925 to 0.935, α_D + 8° to + 10°, n_{D20}° 1.446 to 1.455; soluble in 1 to 2 vol. of 50% alcohol.

With its sweet delicate odor, of great importance in floral compositions of the type of lily-of-the-valley, linden blossom, lilac, cyclamen, and lily, and with its tenacity, hydroxycitronellal is now one of the most important materials in the perfume industry. Despite its sensitiveness to alkalis, hydroxycitronellal may well be used in perfuming soaps provided it is added in well-aged compositions (formation of semi-acetals) such as in combination with cumarin, α-amyl cinnamic aldehyde, methyl anthranilate, or alcohols like terpineol, linalool, citronellol, benzyl and phenylethyl alcohols, etc. Under all circumstances the use of inferior preparations, having a pungent odor or a far too low aldehyde content should be avoided.[7]

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[1] *Bull. Soc. chim.* LV *45* (1929), 809.
[2] *Bull. Soc. chim.* V *3* (1936), 612.
[3] *Compt. rend. 200* (1935), 1112.
[4] *Report* of Schimmel & Co., *1929*, 21.
[5] *Report* of Schimmel & Co., *1929*, 143.
[6] *Bull. Soc. chim.* LV *43* (1928), 848.
[7] *Report* of Schimmel & Co., *1930*, 109. *1936*, 118.

dedicated

by MAISON G. deNAVARRE

■ **OXYCHLESTERIN CREAMS** Suppliers of oxycholesterin bases often fail to advise their prospective customer that probably the best way to make a fine cream with such a base is to thoroughly mill the mass obtained by stirring in water to the oil-oxycholesterin base mixture. Homogenising often cracks the emulsion. Milling or other form of thorough trituration without high pressure, brings best results. Milled creams will stand greater abuse from changes of temperature than those not so treated.

■ **CHEAP CHOLESTERIN** One New York supplier now offers a product for use in place of cholesterin, at a much reduced price. His material contains 33% of free cholesterin, at a fraction of the price of regular cholesterin. It is a hard waxy, practically odorless, straw colored substance, that readily dissolves in fats and oils. This brings to mind the cholesterin of lower price, mentioned in this column some time ago. This product contains more than 33% free cholesterin. The price of the latter material is about half of the usual cholesterin price. It is a dry, odorless amorphous powder, soluble in fats and oils.

■ **MILKY PERMANENT WAVE SOLUTIONS** One supplier offers a special oil used to make ordinary permanent waving solutions *milky*. Two ounces or so is added to each gallon of fluid. Another oil is used similarly, but gives *very* milky solutions, while a third, gives clear solutions containing oil. These have baffled small permanent wave solution makers for some time. Your problem is solved. Try the products mentioned here. They are easy to use, and as stable as it is possible to make them.

■ **PERFUMES AND DERMATITIS** This subject takes on greater importance to cosmetic manufacturers almost daily. From this standpoint, a "Harley Street Skin Specialist" writing in the most recent British contemporary, the *Manufacturing Perfumer*, mentions some of Dr. Baer's work, with comments from Dr. Carlton, and a final reference to a comprehensive list of skin irritants (occupying some ten pages in the original).

■ **MUSCLE OIL** Contrary to what anyone might think, a common query is "please give us a formula for muscle oil." In the first place, there is no such thing as a muscle oil in the eye of the F.D.A. But products carrying this moniker can be made as follows: Mix 10 parts of odorless castor oil with 90 parts of another vegetable oil such as olive, sweet almond, corn or grape seed oils. To this add a stimulating essential oil and perfume composition. As much as 1 per cent of oil of camphor is a favorite. A resin such as styrax or benzoin 0.5 per cent is dissolved in the warmed oils. To this, your desired aromatic compound oil can be added. Preserve with an antioxidant.

■ **LIPSTICK AGAIN** A short time ago I said that the lipstick of the future would not contain pigments, but be composed of soluble dyes, probably in a water soluble vehicle. Complaints from women coming to counter girls in department stores are that their present lipstick is either too drying, too soft, turn purple, not sufficiently permanent, colors not natural, make you look painted, irritate the lips, not smooth, etc. Many of these are easily overcome by proper manufacturing technique, others by correct formulation of the fatty base. But certain ones, indicate soluble colors, probably of the certified food gamut . . . if the base is water soluble. If an oil or fat base is used, special handling as well as special colors are indicated. Nevertheless, here is something to think about.

■ **BULLETINS** The last Bulletin on "Antiseptics, Preservatives and Germicides" is being enthusiastically received. If you want your data complete on these subjects, you can't do better than to get this Bulletin. It is free. Simply write *The American Perfumer* and ask for it. Nine (9) pages of data never before published under one cover. Bulletins on "Sun Tan Preparations" and "Wetting Agents" are also available.



"tell me, lady!"

HAZEL K. WHARTON interviewed a large number of women with the question, "Why do You choose the cosmetics that you do?", and this article outlines the surprising results. Does her analysis mean that there is something more than exaggeration wrong with current cosmetic advertising? Or is the advertising so subtly good that buyers are influenced by it without knowing it? The Editors have their opinion but leave you to form your own without prejudice.

"WHY do you choose the cosmetic that you do?"

And the amazing answer from a fairly good cross-section of women varying in age from about eighteen to forty was: "Why, I don't know. I can hardly tell you."

In the present day when the use of cosmetics is a part of the everyday routine of women scarcely one of those interviewed could say how they were influenced in their choice until pressed, and then they said they used what was given to them as gifts or they bought the same brand used by friends. In many cases the supply of gifts last from Christmas till Christmas.

All of those questioned use cosmetics constantly and present a smart appearance in their attire. Most of the number are young business women although some are married and stay at home.

With the exception of those who are almost entirely supplied by gifts, these women prefer to use cosmetics recommended by friends. They are guided by the effect achieved by a friend. They ask her opinion concerning consistency and lasting qualities, how long it will remain without renewing applications. Color and scent are selected by personal preference.

And when they find a product they like, they use it indefinitely. They do not like to change. Some of these women have used the same product for ten or fifteen years.

In few instances were the individual's rouge, lipstick, powder and cream of the same make. Cream, powder, rouge and lipstick may be of different brands, but if they are satisfied with them they continue to use them year after year and make no effort to match brands. They do not care to experiment. They feel that it is a costly process to find suitable cosmetics, one which they cannot afford, and they do not care to risk their complexions. They are decided in their opinions. And when cosmetics give satisfaction they do not change brands.

Sometimes gifts influence the choice of cosmetics. Usually gifts are of the more expensive brands and in attractive packages, especially if given by men. Very often they are kits of several items. Three girls have replenished those products, one of them for several years. These were outstanding cases in which the women questioned used cosmetics of matched brands and made the purchases themselves.

According to the survey, store displays and attractive containers make the greatest appeal to gift givers.

Cost has something to do with the

choice of cosmetics. Many feel they cannot afford the more expensive brands. They prefer a good brand at a medium price. But, in spite of this, a surprising number of these women buy cosmetics at ten-cent-store counters. Most of them, when they make their first purchases, have no intention of continuing their use. It is only a temporary replacement for the day or, at least, a short period. Or they may want a small quantity to take away for a week-end. Frequently these products are of a brand unknown to them, but, if found satisfactory, they make no change.

Although the women questioned prefer well-known brands, yet, with few exceptions, they emphatically stated they are not induced by advertising to buy any particular product. They choose, rather, to trust the judgment of friends.

In nearly every case these women said they were conscious of advertising for other things but *not* for cosmetics. Those who buy their own feel that cosmetics are too personal to be led by advertising. Paradoxically, most of them will not buy anything but a well-known brand.

Two stated they have used the same facial soap since early girlhood. One of them said that she was *probably* influenced by the soap advertising as a girl and that she *uses powder of the same brand.*

While these women say advertising has no direct influence on their choice of cosmetics, there are a few exceptions. One girl bought powder and another cream that was advertised over the radio. In the case of the first, although the powder pleased, it was replaced by a gift and other purchases of a favorite brand. In the latter, the girl has repeatedly bought the same cream but she buys another expensive make, too. Just one admitted that magazine advertising prompted a choice; one that a sample was influential, yet she uses only the items the sample introduced.

A counter display of vivid-hued lipstick containers attracted the attention of another and she found both color and quality she liked. She still uses that product. A young matron in a second-class city stated that if she wanted to change cosmetics she would undoubtedly place confidence in a salesgirl familiar to her. But nearly all the women questioned said they resisted salesmanship.

One woman bought the full line of products sold by a store demonstrator and has renewed her supply repeatedly. A girl whose complexion displeased her mother was taken to the salon of a cosmetician and has been following the advice given for several years. A student sought the opinion of a dermatologist and uses products recommended.

These were the typical reactions of a fairly large and representative group of women. They represent the admitted purchasing motives of this group. Are there other secret or unconscious motives? Only a psychological examination of the subjects could probably tell. But there may be something here for the alert manufacturer who wants to direct his appeal along effective, and perhaps new and untried lines.

ABSTRACTS FROM FOREIGN JOURNALS

Under this heading are published brief abstracts of articles, both technical and general, from foreign journals in this field, together with page and volume references. We cannot furnish complete copies of these articles or journals but will be glad to supply the addresses of the publishers upon request.

A. Albert writing in the *Pharm. Journal*, **82**, *624, 1936* considers the basic dyes used in pharmacy. General properties and uses are given. Colors starting with the yellow end of the spectrum are mentioned. Most of the discussion deals with the bactericidal nature of dyes. Methods of dulling bright shades are included.

⚜

Oakmoss (Mousse de Chene). Alfons M. Burger. *Riechstoff-Industure Und Kosmetic*, **11**, *p. 41, 1936.* The varieties, habitat, composition and uses of this material are discussed.

⚜

The formulation of theatrical deodorants is given in *Riv. Ital. d.e.d. Prof. Offic.* **18**, 239, 1936. Formulas for lavender, rose, pine, jasmine, cologne and fougere compounds are given. A base for such preparation consists of alcohol 120, perfume compound 10, formaldehyde 6, and water 24 parts. This is diluted in the ratio of 1 part of base to 19 of water when used.

⚜

Part VIII of a "Course in Cosmetics," describing face powders, is given by Frank Sedgwick, in *Soap, Perfumery & Cosmetics*, October, 1936, p. 707. There are five fundamental qualities for face powder. Raw materials of both mineral and vegetable origin are described. Analysis shows that leading brands of face powder consist of talc in great part. Lakes are preferred to soluble dyestuffs, and if the latter must be used, only spirit soluble ones should be utilized. Indefinite bouquet odors are to be preferred, and must not contain irritating ingredients. A formula for a good face powder is as follows: Talc 30, zinc oxide 15, rice starch 15, colloidal kaolin 20, magnesium carbonate light 10, magnesium stearate 5 and precipitated chalk 5 parts. Talcum powders are made similarly to face powders, but they contain at least 80 per cent of talc. Compact powders are also discussed.

⚜

Reginald de Warren reviews the history of essential oils starting with 4000 B.C. in *les Parfums de France* **14**, 220, 1936. Essential oils known up to the 16th century were: bitter almond, spike lavender, cinnamon, cedar, frankincense, juniper, mastic, rose and sage. From the period 1500 A.D. to 1700 A.D. numerous other oils became known. The 18th century saw Eau de Cologne in 1725. Hoffmann established the yield of known essential oils and their specific gravities. His work started dissertations at German Universities on the constitution of these essential oils. A still used in Grasse in 1770 is very like those used in 1936.

⚜

A cosmetic cream made with methyl cellulose consists of: stearin 10, spermacetti 1.5, ammonia 1, borax 0.5, methyl cellulose 0.8-1.0, mineral oil 3.0, glycerine (28° Be) 4, distilled water 78.5 and perfume qs., according to *Pharmaceutische Ztg.*, through *Sief. Ztg.*, No. 44, 908, 1936.

THE AMERICAN PERFUMER
S. L. MAYHAM, *Editor*
MARY L. GOODMAN, *Assistant Editor.*
FELIX A. BELAIR, JR., *Washington Bureau.*



Fair Trade Rules to Bar Demonstrations? The Federal Trade Commission has issued its proposed draft of Fair Trade Rules arising out of the recent Trade Practice Conference. As was anticipated, the rules are virtually those submitted at the conference with the exception of Rule 11 and Rule 12 dealing with the PM and demonstrator problem. Here the Commission, as forecast in *The Perfumer* adopted identical rules covering both classes of payments and made them so stringent as to seem to bar the use of either demonstrators or PM's in the sale of the industry's products.

In effect, the other rules, published in full elsewhere in this issue, re-enact the familiar NRA code of the industry, which, in the opinion of most manufacturers, was very satisfactory and beneficial to the industry.

When it comes to the PM and demonstrator sections, however, it is probable that keen and prolonged controversy will result. The rules, while appearing to permit the use of both PM's and demonstrators have so hedged them about with restrictions as to make the use of either method virtually impossible. Rules 11 and 12 are identical in all respects. They forbid the payment of PM's and demonstrators in any case where the ultimate consumer may be deceived into believing that she is dealing with the store and not with the manufacturer. They forbid PM's and demonstrators where the "full use and enjoyment" of retail outlets by competing merchandise may be hampered or restricted or where a *capacity* for such hampering or restricting exists.

In our opinion, these two rules in effect prohibit the use of demonstrators and PM's for we cannot conceive of their use without either the *possible* deception of the consumer or some *capacity* for hampering or restricting competitors in the "full use and enjoyment" of the retail outlet.

We are not prepared to say that such a sweeping provision represents the will of the industry or would be a salutary measure in the regulation of distributive practices. We urge members of the industry to study the rules carefully and consider their possible and probable effects. The Federal Trade Commission will entertain objections and comments up until March 23. By all means, study the rules and let the Trade Commission know your reactions, remembering that their adoption will virtually revolutionize distributive methods in the industry and lead to sweeping reforms in trade practices and policies.

Support the Chapman Bill Mr. Copeland's new S.5 has been favorably reported to the Senate by his committee and may be passed by that body at any moment. It went through the committee without hearings in spite of the fact that it is a new and totally different bill from any previously considered by the Congress and contains material of great danger to industry accompanied by practically no protection of the public.

From the standpoint of the public interest, it does away entirely with the mandatory provisions which have made the old Wiley law so effective for more than thirty years. It permits a complacent enforcement official (and we have no means of knowing that all future enforcement officials will be as active and competent as is Mr. Campbell) to practically nullify the law by calling anything and everything a "minor violation." Definition of "minor violation" is left to the *discretion* of enforcement officers. It *instructs the enforcement officials* to do nothing whatever although it *permits them* to do many things which might be destructive of industry and harassing and hampering to business.

From the standpoint of industry the bill lacks clarity. Its *definitions* are poorly conceived, that of "drug," for instance, being broad enough to take in a wide range of cosmetics and soaps. Its cosmetic provisions, other than the definition, seem to be directed toward the assistance of special interests in some cases and in others to be the work of a man without any knowledge of the cosmetic industry whatever. "Para" hair dyes, which may in some instances be dangerous in popular use, are virtually exempted from the law. Other allergies are not even considered. Of course, we have known of the author's deep love for the hair dye people but we had thought it extended to other allergies as well. The provisions relating to cosmetic adulteration and misbranding are far more stringent than those relating to adulteration and misbranding of foods and drugs, which are many times as dangerous.

Further it provides that any District Judge may enjoin the advertising and distribution of cosmetics, foods and drugs temporarily with only a perfunctory hearing. Of course the manufacturer would have the right to "show cause" why such injunction should not be made perma-

nent," but that is a shift of the burden of proof to the manufacturer, where it does not belong and off the government, where, in any criminal case, it rightfully belongs. With every possible respect for our District judges, we could name several, not too far from New York, before whom we should hate to defend a cosmetic manufacturer. Such injunctive enforcement is against all sound conceptions of the enforcement of any such statute and is fraught with danger for the industry which must operate under it.

Mr. Copeland has wisely (*from his standpoint*) kept the provisions of his measure very quiet indeed. He secured the old Senate number (S.5) as a designation to camouflage his new and totally different measure. He put the bill through his own personal sub-committee of his own Committee on Commerce. He gave no opportunity for public hearings. He has shown every possible anxiety to get the measure through without the usual and proper consideration given to such important bills by the Congress. The whole matter has been handled very like one of those "joker" measures which occasionally get by one house of Congress through the pleadings and pressure of special interests. We want no such procedure on a Food and Drugs Act, so vital to the welfare of the public and of this industry.

Fortunately, the House has before it a *good* bill, the Chapman bill (H.R. 300). This is essentially the good "S.5" which passed the Senate last year. It is entirely unlike the new "S.5" which Mr. Copeland is sponsoring this year. There is still time to press for its passage and for the defeat of Mr. Copeland's monstrosity. We urge every manufacturer to make every possible effort in support of the Chapman bill and for the defeat of the Copeland measure. We want cosmetic regulation but not under such a bill as that proposed by Mr. Copeland. It is by long odds the worst of a long series of proposals designed for this purpose, protecting neither the public nor the rightful interests of manufacturers.

What of This State Legislation?

Since the various state legislatures convened in January more than 150 bills affecting the cosmetic industry either directly or indirectly have been introduced. Many of these are fair trade bills, state Robinson-Patman proposals and other measures, which, while important, are by no means vital to the continued success of the industry.

At the same time, there are a number of state bills which do vitally affect the conduct of business and the successful progress of the industry. Among these are the proposed Food, Drug and Cosmetic Acts of New York and Texas, a large number of tax measures, state compulsory trade mark registration proposals and many others.

With so many bills proposed it is almost impossible for the industry's association to work successfully on all of them. With the best will in the world, its lay and legal staff are put to it merely to advise members of the proposals and suggest the required action. The T.G.A. is doing a collosal job on legislation this year and thus far with conspicuous success.

When matters of this sort are being handled with apparent efficiency and directness, all of us are prone to think that things are going swimmingly. We are apt to fall into a sense of security which is belied by a complete study of the situation. The industry is hard pressed this year. Some of these bills are going to be enacted no matter how effective our association's work may be.

As we see it, the legislative season, which is really only beginning, can be passed with reasonable success in combatting bad measures only by the consistent work of a united industry. The T.G.A. cannot do it all. State organizations and individuals must co-operate. It is not enough to pass word to the T.G.A. and expect that our troubles are over.

Members of the industry can co-operate in two ways. First, they can work in their own states and localities with their own legislative representatives far more effectively than can the employees and attorneys for the national organization. Second, they can, and *should*, be generous in their contributions to the legislative funds of the association. Nothing can be done unless there are funds to do it. Don't expect the big fellows to bear the entire burden. Their stake is proportionately no greater than that of the smaller companies. In many instances it is not as great. So, if and when appeals for legislative funds are made, remember that you have a vital interest in the matter and give what you can.

letters

Thank You, Mr. Thomas!

EDITOR, *The American Perfumer*,

SIR:—I have had occasion in the past month to read actively the various trade papers and I have found much of interest in them. However, I consider that this month's *American Perfumer* contains one of the most valuable contributions to the cause of good manufacturing and production that I have yet seen. The article by Dr. Herman Goodman entitled "Black Lists and their Value" will be of great assistance, I am sure to the Board of Standards of the Toilet Goods Association, and I wish to take this opportunity of congratulating you for the editorship which enabled you to make such a constructive article available to the members of the industry. In the same issue I find an interesting study of the so-called "skin-rejuvenating" creams written by Mr. Frank H. Sedgwick, as well as helpful and constructive comment on the activities of the Toilet Goods Association. I should be glad to receive on behalf of the Board of Standards any comments elicited by your "Black Lists" article.

I think that one of the most valuable phases of Trade Paper activities as exampled by *The American Perfumer* under your active guidance, is that of impartial and constructive criticism. I shall therefore always appreciate the support that you give to our Board of Standards as being at all times sincere and unprejudiced, and I will equally appreciate such suggestions for our activities as you may from time to time care to make, either personally or through the medium of your publication.

NEW YORK, Feb. 23, 1937

H. GREGORY THOMAS,
Director, Board of Standards.

Flood of Bills in State Legislatures

Many measures affecting the cosmetic industry have been introduced in the 42 state legislatures now in session and many more are coming through every week. This article outlines briefly the character of these proposals although it is by no means a complete summary of state proposals

WITH 42 state legislatures in session or to be in session during 1937, there has been a veritable flood of measures affecting cosmetics and toilet preparations manufacturers. More than 150 bills have already been introduced in these bodies and reports of new measures of one sort or another are coming through at the rate of several each day.

These proposals in general fall into several groups. Some of these groups may be of minor interest and some bills may even be endorsel as beneficial to the industry. Many, however, are of a hampering and restrictive character and would gravely interfere with the progress and development of the toilet goods industry.

Among the most important and pressing class of legislative proposals are the Food, Drug and Cosmetic Bills which have appeared in several states. Failure of Congress to enact a satisfactory measure of this sort is probably largely responsible for this type of legislation. It is particularly dangerous because of its stringent character and the fact that no two of these state proposals are exactly similar to the others.

A second class, also dangerous and injurious to the industry is that of compulsory trade mark registration bills which would give to a state registrant the right to enjoin any interferer with his mark within the state.

Another class of laws is patterned after the O'Mahoney Bill now before Congress. This is virtually a bill to license corporations and businesses and restrict their activities later through threat of license revocation.

There are several state Fair Trade Acts and a bill in Congress (Tydings-Miller Bill) to legalize price maintenance contracts and extend them to interstate commerce.

Other state bills are patterned after the Robinson-Patman Act and seek to extend the principle of non-discrimination between customers to intrastate business.

Sales tax measures have appeared in several states. Practically all of these bills specifically tax cosmetics at varying rates, usually 10 per cent.

Trade Commission bills have also been introduced in several states, seeking to set up state trade commissions with powers analogous to those of the Federal Trade Commission.

An important bill favorable to the industry is the one in Maine which seeks to repeal the state cosmetic act. This is believed to have a reasonable chance of enactment.

Drastic Bill in New York

A very drastic food, drug and cosmetic bill has been introduced in the New York State legislature by Senator Esquirol of Brooklyn. It is known as S. 594 and an identical bill, A. 928, has been introduced in the assembly. This bill provides for compulsory registration of foods, drugs and cosmetics sold within the state. Cosmetics are defined as "all substances and preparations intended for cleansing or altering the appearance of, or promoting the attractiveness of the human person."

The bill would create a Consumers Bureau in the state government which would be charged with the enforcement of the act. It would consist of five members appointed by the Governor. A Committee of Public Health is also created to be appointed by the Governor to consist of five members none of whom may have any interest in the manufacture or sale of foods, drugs or cosmetics. A provision provides for the protection of not only the general public but all allergic persons as well.

All cosmetics would have to be registered under the measure and a registration fee of $25 for each preparation is required. All products are required to pass certain requirements before they are admitted to registration. These requirements include, disclosure of the formula, a statement of all claims made for the product, production under the supervision of a licensed pharmacist or chemist. Poisonous and deleterious ingredients are prohibited and all claims made for the product must be susceptible to proof by "demonstrable scientific facts or substantial medical opinion." Formulas must under some conditions be disclosed on the label. The state Supreme Court is given jurisdiction over enforcement of the law. This very drastic measure would practically force cosmetic manufacturers out of the state.

A somewhat similar and equally drastic bill has been introduced in Texas and others are threatened in several other states.

Summary of State Bills

The following is a summary of many of the bills now pending before state legislatures. It

is not a complete listing of the measures introduced.

Arizona. A state Fair Trade Act has been passed.

Arkansas. A fair trade bill and an unfair competition bill have been introduced.

California. Three bills of the Robinson-Patmon type, a bill prohibiting false advertisement by radio, two bills setting up a state trade commission, a compulsory trade mark registration bill, ten bills seeking to regulate trade practices one of which contains wage and hour provisions, a measure to tax door to door selling, a bill to prevent manufacturers from retailing and retailers from manufacturing, a bill covering false and misleading advertising, gifts, etc., a bill prohibiting use of the word "antiseptic" on cosmetics, two sales tax bills, a measure prohobiting free goods under certain circumstances, a weights and measures bill, and a cosmetic control bill.

Colorado. Three fair trade bills.

Connecticut. Six fair trade bills, and a food, drugs and cosmetics bill.

Delaware. A new Pharmacy Act.

Georgia. Two fair trade bills, a state anti-trust law, a bill on misleading advertising and a state Robinson-Patman bill.

Idaho. Two state fair trade bills and a state Robinson-Patman measure.

Indiana. A state Robinson-Patman bill and a fair trade bill.

Iowa. Two bills forbidding price discrimination.

Kansas. Two fair trade bills and a state Robinson-Patman bill.

Maine. Two fair trade bills, a state Robinson-Patman bill, and a measure to repeal the state Cosmetic Control Act.

Maryland. A state fair trade act.

Massachusetts. Seven fair trade bills, a bill against unfair trade practices and a special sale license measure.

Michigan. Two state trade commission measures, a price discrimination bill, a fair trade bill and a "little N.R.A." proposal.

Minnesota. Four anti-price discrimination bills and a state Robinson-Patman bill.

Missouri. A bill renewing the luxury tax, two fair trade bills, a Robinson-Patman type bill, and a licensing measure to regulate house to house selling.

Montana. An anti-price discrimination bill, a fair trade bill and a food, drug and cosmetic control bill.

Nebraska. A fair trade bill and an unfair trade practice measure.

Nevada. A fair trade bill and a "little N.R.A." measure.

New Hampshire. A fair trade bill and a state Robinson-Patman bill.

New Mexico. Compulsory trade mark registration and a fair trade bill.

New York. Two fair trade bills, a bill on trade practices and price discrimination, a special sales license bill and two bills (identical) to amend the state public health law governing food, drugs and cosmetics.

New Jersey. A state Robinson-Patman bill and a bill amending the state Fair Trade Act.

North Carolina. Two bills on business licensing.

North Dakota. Compulsory registration of trade marks, a food, drug and cosmetic bill, a bill on unfair sales, etc., and a state Robinson-Patman type measure.

Ohio. A bill for emergency price fixing, a state Robinson-Patman bill, registration of trade marks, a bill compeling designation of origin on goods sold in the state and a fair trade bill.

Oklahoma. Two fair trade bills and a bill prohibiting price discrimination.

Oregon. A bill encouraging consumer co-operatives, a fair trade bill, a Robinson-Patman type measure, and a bill to control testimonial advertising.

Pennsylvania. A bill amending the Pharmacy Act.

South Dakota. A fair trade bill.

Tennessee. Two fair trade bills, two bills on co-operatives, and two revenue bills including cosmetics.

Texas. A state anti-trust bill, a food, drug and cosmetic bill, two fair trade bills, a bill on unfair trade practices, and an amendment to the Pharmacy Act covering cosmetics.

Utah. A fair trade bill, a bill on unfair trade practices, and a bill establishing a state trade commission.

Vermont. A fair trade bill.

Washington. A bill compelling marking of merchandise, a sales tax measure, a fair trade bill, a food, drug and cosmetic bill, a bill on false advertising, a measure for compulsory trade mark registration, and a bill on unfair trade practices.

West Virginia. Two fair trade bills, and a food, drug and cosmetic proposal.

Wisconsin. A bill on unfair trade practices.

Wyoming. A fair trade bill, a bill on unfair trade practices, and a bill exempting non-profit co-operatives from taxation.

NEW COMPANIES

Consolidated Soap Corp., New York, cosmetic, 10 shares no par value. Filed by Gettner, Simon & Asher, 285 Madison Ave., New York.

Berney Schlags, Inc., Brooklyn, N. Y., bleaches, soaps; 100 shares no par value. Filed by Ben Shorr, 815 Broadway, Brooklyn, N. Y.

Borden's Laboratory, Inc., New York, cosmetics, $20,000. Filed by Harry Borden, 305 Broadway, New York City.

Widmer Chemical Corp., New York, cosmetics, $100,000. Filed by Conrad Milliken, 60 E. 42nd St., New York.

Lassie Cosmetics, Inc., New York, cosmetics, $5,000. Filed by Fred Canevari, Capital Bldg., Albany, N. Y.

Collier's Cosmetics, Inc., Salem, Mass., cosmetics, 120 shares no par value. Incorporators: Etta Collier, Elliot Collier and Frederick Collier, all of Salem, Mass.

Imogene Shepherd Ltd., Wilmington, Del., cosmetics, antiseptics, etc., 1,000 shares.

Vljean's Perfume Bar, Inc., New York, cosmetics, $5,000. Filed by Adolph Axelrod, 475 Fifth Ave., New York.

Barton Laboratories, Inc., New York, toilet preparations, 200 shares no par value. Filed by Samuel D. Greenberg, 302 Broadway, New York.

Professor Raimon of Paris, Inc., 155 E. 10th St., Erie, Pa., cosmetics and perfumes, $25,000. Incorporators: Prof. A. Raimon, Esther M. Nessler and Thora Pickering.

Saphire Beauty Products Co. Inc., Brooklyn, N. Y., beauty products, $20,000. Filed by Julius Blumberg, 71 Broadway, New York.

Package Design by *FORMULA*

LOUIS TAYLOR, *noted British designer shows that certain rules apply, even to the most fanciful cosmetic packages. Originating packages on a thematic basis is the subject of this interesting study.*—**EDITOR.**

POINT-OF-SALE presentation of cosmetrics will always be a nightmare, and it is somebody's job to rationalize package production.

It doesn't matter what amount of publicity has been put into a line if it falls on its haunches on display. Glamour or sophistication may have been claimed for this or that product, but unless the necessary atmosphere is carried with the package range, sales are down.

How do you go about looking for a new package range? The most gifted artist does not reach his arms into the air and pull down a picture ready made, with a certified check stuck on the back. He looks around for something to fit his desire for expression; *seeks* a *theme.*

Just the same way a package man doesn't make pretty boxes and then put them up to the perfumer for world sales. The boxes and bottles have got to be suitable, effective.

Suitability, for a perfumery pack, means fitness to carry conviction to the user. Effectiveness means ability to push that conviction forward. To get effectiveness you must build upwards and outwards from *Theme.*

Take it that the perfumery fashion is a rose note, and that the cosmetry ideal is the note of the fresh countryside. No perfumer will try to carry that idea on a severe black and white striped box. He must express the cosmetry ideal in the design. The label colors must be, say, a play of ivory and rose red, with faint jet trimmings. The design must have, say, a superfine rosebud or rose motif. The bottles must be chubby and hearty. In selling sweet simplicity, it is necessary to be simply sweet. The title, "Wildwood", "Dora", "Rosa", must further and back up the ideal until the completed package range conveys a glimpse of dew-damp roses, a promise of rose-cream complexion.

The range does not come out in a flash of inspiration. It has to be tied to market knowledge and keenness for one's own particular job.

The manufacturing perfumer knows his market and its fashions. If he is going to sell an oriental perfume at point of sale among the mass of consumers, the Eastern stop will be pulled out hard. If the same product is going to the loftier spheres of New York or Boston, a large dash of sophistication will have to be slung into the palette. But the theme, as a



Myrurgia, Bourjois and Coty have carefully followed out the theme of their products in their packaging.

proper foundation, is everything.

Assume that fashion throws up a Spanish cosmetry ideal. Every miss, mademoiselle and fraülein wishes to get the señorita note. *Spain* is the *theme*. "Señorita" kicks up at you for a title. Bald and broad, but good for a start. "Lucia", "Dolores", "Carmen." They all carry Spain. Guitars, toreadors, galleons, mantillas, are the decorative notes. Jet black and scarlet are the color signals. The artist must play with these ingredients until he produces the right distinctive note, must refine or broaden the design until the appeal to the particular market is exact. Until the theme is struck, however, the manufacturer should not connect with the artist.

Bourjois wanted to sell the Parisian ideal. The fashion at the time was tending, as it still is, to sophistication. To be merely French in a pretty way was useless, was outworn. Bourjois' theme was the note of living Paris. So he put it on paper and card with apaches, gendarmes, artists, boulevardiers, diners out, as pictorial motifs, thumbnail style, against an evening sky dusted with stars, plus a crescent moon. Not a picture as such, but just a design of terse tense sketches on blue paper. The Paris evening was epitomised under 'Soir de Paris' . . . 'Evening in Paris' for the Anglicised field. Bourjois got away with it. It still is evening in Paris. And the starting point was Theme.

French genius, Coty, has worked for prestige as a perfumer with the authentic French note. He wanted sophistication generally, not anchored to sharp degrees of fashion. So he took color and shape and fine form and hammered the hiccoughs out of them, and signed them, 'Coty.' His theme was . . . authenticity. Coty may not have been theme-conscious, but his packages analyze out to theme as the base of design.

Theme is not of necessity tied to fashion, but it *is* a starting point in all package formulation. If the package buyer wants to see theme rendered in a food commodity pack, 'Dromedary' dates are an example. No need to analyze the pack. To see it is to have the prescription.

One particular point gives the American perfumer a world pull. That is the ability to draw on authentic color and design. The Dutchman doing a poster in red and green brings up a Dutch red and green. The Japanese has a peculiarly Japanese blue, for example. The Italian has his own special color notes. The American, however, can draw from the whole pack and know that if he wants a peculiarly Spanish red, somebody will deal it straight out.

One day the swing in cosmetry fashion may be to be utterly simple, when somebody will have a chance to sell a simple title in a simple way. As to who first pushes this particular barrow down the Rue de la Paix, it is too early to decide, but success will be with the man who soaks his package range right through with the simple note, delicately expressed. Theme will do the job for the man who seeks the honor.

On the other hand, sophistication may be pushed on to the uttermost limit, but theme will still be the necessary base.

NEW PRODUCTS AND PROCESSES

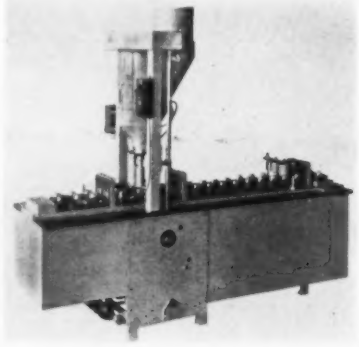
Under this heading are published brief articles concerning interesting new products and processes offered in the industry. The material is in every instance furnished by the sponsor of the product and the article is not to be considered an endorsement by this journal. Further information regarding any of the items mentioned will be sent on request.

Two Dram Dispenser

Maison Maxime, Chicago, has developed a new two dram perfume dispenser which it indicates avoids waste and spillage and fills any size bottle quickly and accurately. It is of the tube and bulb type.

Automatic Filler

Stokes & Smith Co., Frankford, Philadelphia, Pa., have perfected their Automatic Duplex Filling Ma-



chine with an automatic conveyor and cap pressing device for filling and capping two cans in one operation. It is stated that the production speed is 60 cans per minute and that it may be used to fill two cans of the same size or cans of two different sizes at the same time.

Extended Face Powder Colors

R. F. Revson Co., New York, has brought out a new series of extended face powder colors consisting of one part of Cosmetic Ochre R or Cosmetic Pink B in talc. The new products are to be used directly in powder and according to the company's announcement permit small manufacturers easier manufacture without installation of costly equipment. The new colors are known as Extended Ochre R and Extended Pink B. Other shades will be added from time to time.

Synthetic Wax

Emulsion Products Co., Inc., Los Angeles, has developed a new synthetic wax sold under the name "Syntho-Wax" which it claims is a complete substitute for beeswax in the manufacture of cosmetics. Creams made with this product are said to be pure white in color, stable and more readily perfumed than creams made with beeswax.

Portable pH Meter

The Thwing Instrument Co., Philadelphia, has developed a new portable pH meter for use in the cosmetic and other industries where hydrogen ion concentration is an important problem. The new machine reads pH direct and the company claims can readily be used by any non-technical person.

Belgian Essential Oils

DR. ERNEST GUENTHER, Chief Research Chemist of Fritzsche Brothers, Inc., New York, concludes his discussion of essential oils produced from Belgian plant material with a survey of oil of hops and its characteristics

AN important constituent of hops is the essential oil to which the characteristic odor is due. Most, if not all, of the essential oil together with the resins and the bitter acids seems to be contained in the lupulin. G. Louveau[30] showed by steam-distilling separately hop cones containing lupulin, isolated lupulin, and hop cones freed from lupulin, that the latter yield practically no essential oil but only a very slightly odorous distillation water. Therefore, it would seem logical to use as distillation raw material only the lupulin which can be isolated easily from the hop cones by shaking and beating. This would mean less raw material to be charged into the stills and result in a saving in steam but, unfortunately, lupulin in contact with boiling water easily conglomerates and also causes a great deal of foaming. Therefore, in most cases, the entire hop cones are used for distillation purposes. The yield of essential oil varies greatly and depends upon the origin, quality and especially the age of the hops. Our average oil yield from Belgian hops has been about 0.6%; it is lower in old hops and higher in fresh hops. F. Rabak[31] obtained from fresh Californian hops 0.23% and from fresh Californian lupulin 0.72%.

For distillation purposes it is very important to use fresh hops, not only because of the higher content of essential oil but also because of the greater amount of resins contained in older hops. Particles of the resins are mechanically carried over during the steam distillation process and these impart a decidedly sour character to the distillation water and to the crude oil. Part of the essential oil of hops is dissolved in the distillation water and may be recovered by cohobation or by extraction with volatile solvents. These soluble "water-oils" contain valeric acids and higher fatty acids. They have a very high acid number, a brownish color and semi-solid consistency. When adding the "direct oil" separating automatically from the distillation water in the florentine flask to the above mentioned "water-oil" obtained by volatile solvent extraction of the distillation water, the crude oil of hops results. It has a semi-solid consistency, a brownish color and a very high acid value. Such crude oils of our own distillation showed the properties given in Table XI.

Rectification gives oils of much lighter color, thinner consistency, lower specific gravity, lower acid number and much finer characteristic odor. For instance, when rectified by steam distillation, the above described oils showed the properties given in Table XII.

Since the acid value of these oils is still too high, they were shaken for a short period of time with dilute solutions of sodium carbonate, after which the oils showed the constants given in Table XIII.

We also submitted hops to distillation with direct steam without cohobation. The crude oils thus obtained were almost of better odor than the crude oils distilled with indirect steam and subsequent cohobation. The yield was good, probably because we used hops of the latest, i.e., 1936 harvest. (See Table XIV.)

Since the acid value of the crude oils in this case, too, was still relatively high, they were submitted to slow



and very careful rectification with steam. These rectified oils had a normal acid value and very fine odor which made treatment with sodium carbonate solution unnecessary. (See Table XV.)

Hops which have been treated with sulfur are less suitable for distillation. If such raw material is employed, the essential oils obtained must be specially treated in order to impart to them a softer tonality. According to F. Rabak, mild saponification gives good results.

Gildemeister & Hoffmann[32] indicate the following constants for oils of hops:

Specific Gravity $d_{15}°$:	0.855 to 0.899
Optical Rotation α_D:	—1° to +2° 27′
Refractive Index $n_{D20}°$:	1.4852 to 1.4936
Acid Number:	0.5 to 10
Ester Number:	13 to 40
Ester Number after Acetylation:	18 to 46
Solubility:	The oil is hardly soluble in 90% alcohol. Old oils are not clearly soluble even in 95% alcohol. This is probably due to the polymerization of myrcene.

F. Rabak[33] established the following properties for North American hops oils:

Specific Gravity at 20° C:	0.823 to 0.877
Refractive Index $n_{D20}°$:	1.4705 to 1.4856
Acid Number:	1.0 to 3.6
Ester Number:	44.4 to 61
Solubility:	Soluble in 3 to 5.4 volumes of 94% alcohol.

Nebovidsky and Horel[34] distilled a number of oils from Czechoslovakian hops, sulfured and not treated with sulfur, and obtained yields varying from 0.2 to 0.37%. Oils distilled from older hops contained much resin and had a deep, rusty color and an acid odor. These crude oils were redistilled and upon analysis showed constants varying between the following limits:

Specific Gravity at 20° C:	0.831 to 0.861
Refractive Index $n_{D20}°$:	1.4728 to 1.4912
Acid Number:	1.5 to 8.2
Ester Number:	23.1 to 39.1

Sulfur-treated hops yielded 0.11 to 0.14% oil of disagreeable odor.

G. Louveau[35] steam distilled Bavarian, Bohemian and Burgundian hops, analyzing the direct oils and the "water soluble oils" separately. The constants shown in Table XVI were obtained:

TABLE XI

Sample No.	Origin	Yield of Oil	Specific Gravity $d_{15}°$	Refractive Index $n_{D20}°$	Acid Value	Saponification Value	Solubility
1.	Germany	0.52%	0.961	1.4990	78.4	113.9	Hardly soluble in alcohol.
2.	Germany	0.64%	0.966	1.5049	71.4	108.3	
3.	France (Greenish cones)	0.35%	0.950	1.4940	46.2	70.9	
4.	France (Greenish cones)	0.345%	0.952	1.4940	49.0	83.1	
5.	France (Greenish cones)	0.3%	0.956	1.4950	46.2	78.4	
6.	France (Super-annuated)	0.162%	0.976	1.5009	60.2	112.0	
7.	Belgium	0.142%	0.993	1.5071	86.8	141.9	
8.	France (Alsace—Super-annuated)	0.426%	0.945	1.4938	50.2	70.8	Soluble in 0.5 vols. 95% alcohol; very slightly opalescent in 10 vols. and more.
9.	France (Alsace—1936 Harvest)	0.790%	0.905	1.4941	20.0	40.8	0.5 vols. 95% alc. Turbid with 2 vols. and more.
10.	France (Alsace—1936 Harvest)	0.808%	0.929	1.4980	29.2	54.0	0.5 vols. 95% alcohol and more.

All oils had a decidedly sour note, reminiscent of valeric acid.
It appears that fresher hops material upon distillation gives a higher yield of oil.

TABLE XII

No.	Origin of Hops	Yield on Steam Distilling Crude Oil	Specific Gravity $d_{15}°$	Refractive Index $n_{D20}°$	Acid Value	Saponification Ester Value	Saponification Value	Solubility
1a	Germany	50.0%	0.933	1.4921	35.6	37.2	72.8	Hardly soluble in 90% alcohol.
2a	Germany	34.1%	0.927	1.4941	27.9	31.6	59.5	
3a	France (Greenish Cones)	65.8%	0.935	1.4935	23.6	20.1	43.7	
4a	France (Greenish Cones)	56.6%	0.923	1.4925	33.1	16.3	49.4	
5a	France (Greenish Cones)	67.7%	0.928	1.4950	27.3	25.4	52.7	
6a	France (Super-annuated)	67.5%	0.949	1.4956	55.0	33.7	88.7	
7a	Belgium	44.0%	0.961	1.4973	44.3	40.5	84.8	
8a	France (Alsace—Super-annuated)	58.7%	0.939	1.4952	23.9	21.9	45.8	Soluble in 0.5 vols. 90% alcohol and more.
9a	France (Alsace—1936 Harvest)	64.2%	0.895	1.4924	3.9	18.2	22.1	Soluble in 0.5 vols. 95% alcohol and more.
10a	France (Alsace—1936 Harvest)	52.9%	0.904	1.4948	7.6	12.3	19.9	Soluble in 0.5 vols. 95% alcohol and more.

TABLE XIII

No.	Origin of Hops	Refractive Index $n_{D20}°$	Acid Value	Ester Value	Saponification Value
1-b	Germany	1.4951	11.6	49.2	60.8
2-b	Germany	1.4970	11.9	33.3	45.2
3-b	France (Greenish Cones)	1.4951	12.6	32.7	43.3
4-b	France (Greenish Cones)	1.4955	9.4	27.1	36.5
5-b	France (Greenish Cones)	1.4970	12.9	29.0	41.9

TABLE XIII (Continued)

No.	Origin of Hops	Refractive Index $n_{D20}°$	Acid Value	Ester Value	Saponification Value
6-b	France (Superannuated)	1.4991	17.1	41.4	58.5
7-b	Belgium	1.5000	15.2	47.3	62.5
8-b	France (Alsace-Superannuated)	1.4970	8.9	37.9	46.8

The odor of these oils was very fine, clean and smooth.

TABLE XIV

No.	Origin of Hops	Yield of Oil	Specific Gravity $d_{15}°$	Refractive Index $n_{D20}°$	Acid Value	Ester Value	Saponification Value	Solubility
11.	France (Alsace-1936 Harvest)	0.87%	0.906	1.4948	27.6	19.6	47.2	Soluble in 0.5 vols. 95% alcohol; turbid with more.
12.	France (Alsace-1936 Harvest)	0.744%	0.934	1.5018	37.3	21.9	59.2	Soluble in 0.5 vols. 95% alcohol; turbid with 2 vols. and more.

TABLE XV

11-a	France (Alsace-1936 Harvest)	63.2%	0.896	1.4928	6.1	34.7	40.8	Soluble in 0.5 vols. 95% alcohol; cloudy with more.
12-a	France Alsace-1936 Harvest)	55.5%	0.912	1.4971	6.4	12.5	18.9	Soluble in 0.5 vols. 95% alcohol and more.

TABLE XVI

Hops	Oil	Yield	Specific Gravity $d_{15}°$	Optical Rotation α_D	Refractive Index $n_{D20}°$	Acid Value	Ester Value
Bavarian	Separated	0.30%	0.8617	+0° 18′	1.4850	9.1	21.0
	Water Soluble	0.07%	0.9101	...	1.4910	25.6	45.5
Bohemian	Separated	0.28%	0.8673	—0° 4′	1.4852	11.5	24.5
	Water Soluble	0.06%	0.9265	...	1.4922	33.8	58.1
Burgundian	Separated	0.35%	0.8715	—0° 10′	1.4883	8.5	20.3
	Water Soluble	0.04%	0.9208	...	1.4968	34.3	32.2

Chemical Constitution

Dipentene: Found by A. C. Chapman[36] in the lowest boiling fractions.

Myrcene: The olefinic terpene observed first by Chapman[37] was identified by Semmler and Mayer[38] as myrcene, by transformation into dihydromyrcene (m.p. of tetrabromide 87-88°), also by transformation into myrcenol.

Linalool: Found by Chapman[39] in the middle fractions.

Iso nonylic acid (?): In the same fractions, Chapman[40] found the ester of a volatile acid $C_9H_{18}O_2$, probably iso nonylic acid.

l—α-caryophyllene and β-caryophyllene: In the important fractions 263-266° C.; $d_{15}°$: 0.900, Chapman[41] had observed a caryophyllene-like sesquiterpene of very low dextro or laevo-rotation and called it "humulene." This, however, was shown by E. Deussen[42] to consist mainly of i-α-caryophyllene and a little β-caryophyllene, identified as nitrosochloride and nitrosate.

Formaldehyde: Positive color reaction with Lebbin's solution (5% resorcinol in a 40 to 50% solution of NaOH. [F. Rabak[43]].

Formic Acid: Reduction of $HgCl_2$ to HgCl. [Rabak[44]].

Valeric acid; heptylic acid: Both identified as Ag salts by Rabak[45].

The esters of formic, acetic, butyric, octylic, nonylic, and decylic acid: were identified by the same author. He neutralized the acid mixture with KOH, gradually precipitated with $AgNo_3$ solution and determined the Ag content in the various precipitates.

Myrcenol: is present according to Rabak[46] probably in free and in esterified form (n-heptylic, n-octylic and n-nonylic acid).

Luparone: In the higher fractions of hops oil (80-210° C. at 4 mm.). Chapman[47] found a new ketone $C_{13}H_{22}O$ (m.p. of semi-carbazone 98°) which he called "luparone."

Luparenol: The same author[48] established the presence of an unsaturated sesquiterpene alcohol with one double linkage $C_{15}H_{24}O$; b.p. 125-128° at 3 mm; d_{20}^{20} 0.9738; $[\alpha]_{D20°}$; –3,7°; $n_{D20°}$: 1.5023. M.p. of phenylurethane 157°.

Luparol: Also found by Chapman[49]. It is an optically inactive phenol ether of faint but agreeable odor, $C_{15}H_{20}O_2$; b.p. 122-124° at 2 mm. Boiling with 50% KOH solution transforms this phenol ether into iso-valeric acid and a phenol $C_{11}H_{10}O_2$ (?) (b.p. 115-117° at 4 mm.). Oxidation with $KMnO_4$ gives mainly iso-valeric acid.

According to Rabak[50] hops oil consists of: 30-50% myrcene; 15-20% humulene; 20-40% myrcenol ester.

The latter, however, is in excess of the usually observed ester numbers.

Nebovidsky and Horel[51] suggest the following proportions for Czechoslovakian hop oil: 30-50% myrcene; 15-25% sesquiterpenes; the balance consisting of myrcenol, geraniol, linalool, luparenol, luparone and luparol.

G. Louveau[52] believes that oil from Bavarian hops is composed of about: 22% myrcene; 56.4% sesquiterpenes (b.p. 87-109° at 14 mm.); the balance consisting of the other compounds described above.

Adulteration of Oil of Hops

Pure oil, because of its strong odor, may be sophisticated easily by the addition of all kinds of fractions of lower priced oils and especially those compounds which occur naturally in oil of hops, i.e., geraniol, linalool and caryophyllene.

Application of Oil of Hops

The oil may be employed in very small quantities in certain types of perfumes such as chypre or fougère, to impart a somewhat unusual and concealing note. However, the main application of oil of hops is in the flavoring of beer. Evidently during the process of beer brewing the greater portion of the volatile oil present in hops is lost by

evaporation or resinification. The addition of a small quantity of oil of hops, therefore, replaces the lost aroma and may serve instead of dry-hopping. Naturally, only absolutely pure oils should be used for this purpose.

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[30] *Revue des Marques de la Parfumerie et de la Savonnerie, November* 1932, 420.
[31] *American Perfumer,* 22 (1927), 6.
[32] *Die Aetherischen Oele,* Third Edition, Volume II.
[33] *Journ. of Agric. Research,* Dept. of Agric. Washington 2 (1914), 115.
[34] *Chim. et Ind.,* 1933, 29; Spec. No. 1208—13.
[35] *loc. cit.*
[36] *Journ. Chem. Soc.* 83 (1903), 505.
[37] *ibidem.*
[38] *Ber. d. Deutsch. chem. Gesell.* 44 (1911), 2009.
[39] *loc. cit.*
[40] *ibidem.*
[41] *Journ. Chem. Soc.* 64 (1895), 54 and 780.
[42] *Journ. f. prakt. Chem.* II. 83 (1911), 483.
[43] *loc. cit.;* also *Ber.* Schimmel & Co., April, 1915, 32.
[44] *ibidem.*
[45] *ibidem.*
[46] *ibidem.*
[47] *Journ. Chem. Soc.* 1928, 1303.
[48] *ibidem.*
[49] *ibidem.*
[50] *loc. cit.*
[51] *Chim. et Ind.* 1933, 29. Spec. No. 1208-13.
[52] *Revue des Marques Parfum. Savon.* 10, 420-21, 456-58.

SUPPLIERS' HELPS FOR MANUFACTURERS

Copies of any of the material mentioned in this section may be had from The American Perfumer unless otherwise stated. Simply send a postal card to Suppliers' Helps, The American Perfumer, 9 East 38th Street, New York City.

☐ H. C. Ryland, Inc., New York. *Catalog.*
This is the company's regular February price list of essential oils, aromatic chemicals and perfume specialties.

☐ Industrial Chemical Sales Division of West Virginia Pulp & Paper Co. *"Taste and Odor Control."*
Two issues of January of this interesting publication discuss work accomplished along sanitary lines in the flood district and give a series of tests for activated carbon.

☐ Armstrong Cork Products Co., Lancaster Pa. *"Modern Closures" for February.*
The current issue is beautifully illustrated and contains a most interesting article on sealing of a new nasal vaporizer.

☐ Association of Consulting Chemists and Chemical Engineers, Inc., New York. *"Directory of Members."*
This is a complete directory and descriptive roster of the association membership. (Available only on special request to the association at 50 East 41st St., New York.)

☐ Schimmel & Co., Inc., New York. *"Schimmel Briefs" No. 23.*
This circular is devoted to hints for the manufacture of shaving soaps, freckle bleaches and the use of aluminum stearate in powders.

☐ Kimble Glass Co., Vineland, N. J. *Photograph of "Mu-Sol-Dent" Bottle.*
The company has sent us a fine photograph of the package of "Mu-Sol-Dent" mouth wash showing the Kim-



ble vial which contains the powder to be dissolved in the larger bottle of liquid. (Photograph not available for distribution.)

☐ American Arbitration Association, New York. *"The Arbitration Journal," Vol. 1, No. 1.*
The Association has begun publication of a magazine devoted to the principles and practice of arbitration of commercial disputes. The first issue contains several interesting descriptive articles on the use of arbitration in several industries and an article by Floyd B. Odlum on The American System of Arbitration.

☐ Fritzsche Brothers, Inc., New York. *"Wholesale Price List."*
The company's regular monthly price list of essential oils, aromatic chemicals and specialties.

☐ Pfaltz & Bauer, Inc., New York. *"Photo-electric cells and apparatus."*
This booklet describes and illustrates the photo-electric equipment, made by Dr. Bruno Lange and distributed by Pfaltz & Bauer in the United States. Several items of interest to the cosmetic industry, notably a colorimeter are described and illustrated.

☐ Givaudan-Delawanna, Inc., New York. *The Givaudanian for January.*
This issue contains an article by Dr. E. C. Kunz, executive vice-president, describing "An Advance in the Field of Sunburn Protective Chemicals," a new development by Givaudan chemists.

☐ George Lueders & Co., New York. *Wholesale Price List, March, 1937.*
The company's list contains prices and specifications on essential oils, flower oils, floral waters, aromatic chemicals and numerous specialties for the perfume, soap and extract industries. Also included are the flower oils of Camilli, Albert and Laloue, Grasse.

☐ Van Dyk & Co., Jersey City, N. J. *"Measuring Sunburn Protective Agents" and "Laboratory Data on 'Escalol.'"*
These two bulletins are particularly interesting at this season when preparation is being made for manufacture and promotion of sun protective cosmetics. The first is a reprint of the article by J. W. Orelup, research chemist for Van Dyk, which appeared originally in *The American Perfumer* last Spring. The second is a technical discussion illustrated by charts, showing the effectiveness of the company's "Escalol" in various media. Anyone working on suntan preparations will find both of these publications of great interest and value.

HEADLINES—

WHEN WOMEN CLICK

The gentler sex takes us for a perennial ride—and somehow we seem to like it!

Some say the bulk of the cosmetic business is built upon the vanity of women. From that standpoint, such vanity creates business far and wide throughout the industry.

But upon occasion, the lady can be destructive. Look at what the athletic woman did to the time-honored corset and petticoat business. Remember what the aviator's cap did to the once flourishing hat business. The vogue for bobs made the hair pin and hair net people do flip flops.

And then see what the women did for the cigarette business. They boomed it. The bridge craze has enormously increased the sale of playing cards and made a crisis out of Culbertson et al.

Suppose the wind turned and women eschewed cigarettes. A large percentage of the business would disappear.

Still, fashion and mode have made and unmade markets, have built and ruined business.

Should the cosmetic business follow style? No. It should be ahead of style. Looking ahead and interpreting style and fashion is an important factor in this business. That is why Miss Edna Colladay Pierce analyzes style trends that can serve as promotion keynotes in cosmetic selling. It clicks.

TO SIT OR NOT TO SIT?

This question bothered the nation acutely just recently at Flint, Mich., and rumblings have been heard in other industrial centers.

They sat. And the law was paralyzed.

If you sit in the street, a car runs over you—or a cop jacks you up and out. If you organize a sit-down demonstration and threaten to fight, you get away with it, at least, in some spots.

If the cook wants "privileges" which your wife refuses, she "sits" in *your* house.

If your secretary wants you to buy her lunch (and you refuse) she sits in *your office*.

Are we writing law by violence?

Does one's right to occupy the premises of others, one's right to use the property of others, one's right to keep you out of your home or factory, depend upon the ability of some one or more persons to seize such premises, property, home, or factory, and hold it in defiance of law, order and the Courts, until you give in to arbitrary demands?

I wonder.

Of course, this is only theorizing. There hasn't been a strike, either sit-down or stand-up, in this industry in our memory. But that's no guarantee that there never will be!

SOME "FAIR TRADE" QUERIES

Fair trade laws approved by the highest court in the California and Illinois cases have brought price maintenance again into the spotlight.

With 42 legislatures sitting and almost every one of them considering such laws for their own states it is almost time to study the ultimate effects of these enactments.

What will retailers do about it? What of the battle between "known" and "unknown" brands? What about quantities sold? How will "loss leaders" be replaced (they won't be abandoned you know)?

It looks perfectly elegant but there may be a few well aimed punches landing where and when we least expect them.

IS THE F. T. C. CUTTING TEETH?

What with the line-up of initial citations on the part of the Federal Trade Commission directed to several prominent concerns in this industry, plus the bills now in process to put teeth in the F.T.C. Act such as penalties and the like, the legal grist is grinding apace.

Some people behave just naturally, while some do as the others do—with virtue or the lack of it. Competitive advantage puts us all on our mettle to get there somehow. Possibly there is some relaxation ahead for the cosmetic companies—an era of more normal trade practices, with elimination of some of the present excessive strenuosity—which will be welcome to the entire industry—if they *all* have to take it.

The F.T.C., Messrs. Patman and Wheeler et. al. seem determined to push us into the more quiet competitive waters which, after all, may not be so very wet.

WE TAKE A BOW ON THE "BULLETINS"

Once every so often our dreams come true. The *Perfumer* editorial spirit conceived a new service to its readers. In a word, BULLETINS on important and timely subjects, covering each one fully and completely, giving all the necessary information for the chemist or manufacturer to work with, telling him just what Suntan, Wetting Agents, Antiseptics and Preservatives, etc., are all about.

And did it click?

Frankly, the editors had no idea how important this new service would become. Requests pour in for the bulletins from all parts of the world.

People do like something for nothing, especially when it is really something.

H. J. W.

NEWS and EVENTS

Cosmetics to Be Shown at Fair

The cosmetic industry will share with the clothing industry one of the fourteen major areas of the New York World's Fair. It will be the industry's first integrated display at a world's fair in almost fifty years. Separate sections were devoted to the industry in 1876 in Philadelphia and in 1893 at Chicago, but no fair since has made special provisions for this important group.

The industry has already purchased more than $25,000 of the World's Fair debentures through a committee headed by H. L. Brooks, treasurer of Coty, Inc., and president of the Toilet Goods Association. B. H. Badanes of McKesson & Robbins and C. S. Welch, secretary of the association are the other members of Mr. Brooks's committee.

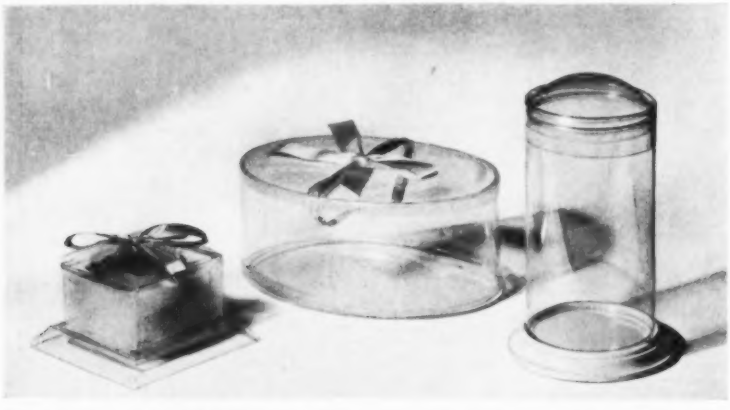
Production Managers to Meet in New York

The National Association of Production Management, a new organization comprising plant managers of leading houses in the drug and cosmetic fields will hold its annual convention at the Hotel Pennsylvania, New York, March 25. The meeting will be held in connection with the Packaging Exposition which takes place in the same hotel that week. William M. Bristol, Jr., Bristol-Myers Co., will preside over the sessions. He was chosen president of the association at the first meeting last year. H. M. Bowman, of Stanco. Inc., is vice-president and H. F. Brownell, McKesson & Robbins, Inc., treasurer. Members of the board include A. P. Walters of McCormick & Co., H. A. Sumner of the Norwich Pharmacal Co., J. Y. Lund of Lambert Pharmacal Co., H. J. Lehman of Wildroot Co., and W. Van Alan Clark of Allied Products, Inc.

Cosmetic Credit Men's Ass'n Meets

The monthly meeting of the Drug, Cosmetic, and Chemical Men's Association brings attention to the useful service rendered the industry through the voluntary cooperation of this group. Eight years ago, eight men organized the association. Today there are 33 active and interested company members.

New officers for 1937 are as follows: L. Candee, L. Sonneborn Sons, Inc., chairman; Edwin P. Agnew, Heyden Chemical Corp., vice chairman; H. W. Knapp, Armstrong Cork Products Co., treasurer; Nat Ottensoser, secretary; F. J. Burg, assistant secretary. The Board of Governors includes C. Robinson, Phoenix Metal Cap Co., Chairman; H. P. Wade, American Cyanamid & Chemical Corp.; Fred Kaiser, Richard W. Krause Inc. and S. Rosenfeld, J. Rabinowitz & Son, Inc. The association which was organized a year ago with eight members now has a membership of 33 companies.



Containers made of "Plastacele," a transparent plastic material, were a feature of the recent National Notion and Novelty Exhibition held in New York. These boxes are light in weight, waterproof, dustproof and non-inflammable, and can readily be adapted for use in the toilet preparations industry. Plastic material by E. I. duPont de Nemours & Co., boxes by Baronet-Lorna Co.

Dodge & Olcott Co. Has Sales Meeting

Dodge & Olcott Co., New York, had a family gathering during the week of February 8. All of their out-of-town salesmen and branch managers visited the home office, with the exception of their Los Angeles representative. Their time was much occupied with three business meetings, and a banquet, held at the Lafayette, February 9, at which there were 27 seated, many of those in the home office participating with the out-of-towners.



Mr. Moore



Mr. Allen

The guests of honor were Messrs. Wm. G. Moore, manager of the Chicago branch and F. C. Allen, treasurer of the company, one of whom had just finished his fiftieth year of service with the company, while the other is now in his fiftieth year. In the point of view of *service* H. I. Cooper, Philadelphia manager, was the oldest present, having completed almost 52 years with the company. Needless to say all of the employees in the home office enjoyed seeing their fellow workers. All left for their respective homes very happy with their visit to the big city and strange to say the police were not notified of any being lost.

Stokes Appoints New Advertising Manager

F. J. Stokes Machine Co., Philadelphia, Pa., has appointed Howard M. Buckman as advertising manager. Mr. Buckman who has had many years of advertising and sales experience assumed his new duties the first of this year.

Lelong Wins Injunction in Case with Dermay

Federal District Judge Caffey in New York, has granted an injunction to Lucien Lelong, Inc., Chicago, in a case brought against Dermay Perfumers, Inc. Lelong claimed that the defendant had imitated the bottles and packages of its "Mon Image" perfume. Judge Caffey upheld the contention and ordered an injunction against Dermay prohibiting that company from imitating the packages in the sale of perfumes and toilet preparations and granting an accounting of damages in subsequent proceedings before a Special Master.

Majestic Metal Specialties Inc. Expanding It's Facilities

Nathan Kasdan, president and founder of Majestic Metal Specialties Inc., New York, has returned from a well earned vacation cruise through the West Indies which included stops in Havana, the Panama Canal, Granada, Port au Spain and Port au France. While in Havana Mr. Kasdan appointed Roberto Ortiz Cuban representative.

Clement E. Horton, who recently joined the company as general manager and assistant to Mr. Kasdan, also announced the appointment of Charles J. Horney, 1313 N. Vermont Ave., Los Angeles, as Pacific Coast representative; and James T. Johnson, 1257 W. 97th Pl., Chicago, as Midwest representative. These appointments are in line with the policy of reorganization, research and expansion undertaken with a view to extending the service and scope of the company.

Alvin E. Smith Flies From Trinidad to New York

Alvin E. Smith, vice-president and sales manager of the George Silver Import Co., New York, returned February 3 from a vacation to Bermuda and the West Indies. Mr. Smith sailed on the *Lady Drake* from Boston, January 16 first visiting Bermuda and then making stops in Dominica and Barbados. He returned by airplane from Trinidad to New York, the return journey being made in three days including 1900 miles of travel across the Carribean Sea. Overnight stops were made in Puerto Rico and Miami, Florida.



Some Typical Scenes from the "Kimco Follies"

Bristol-Myers Shows Gain in Earnings

Earnings of Bristol-Myers Co., New York, for the year 1936 amounted to $2,275,251 as against $2,232,572. Income for the final quarter of 1936 was $281,482.

H. G. Mackelcan Elected Secretary of Innis Speiden

H. G. Mackelcan has been elected secretary of Innis, Speiden & Co., New York, to succeed C. Leith Speiden who resigned from the company January 5. Mr. Mackelcan has been associated with Innis, Speiden & Co. for 29 years joining the organization as a junior clerk after his graduation from the East Orange High School. Since that time, he has served the company in almost every capacity and in 1926 became general sales manager; and in 1927, vice-president in charge of sales.



Mr. Mackelcan

Innis, Speiden & Co. was established in 1816 and since that time has built up a world wide business in industrial chemicals, gums, and waxes. Factories are located in Jersey City, N. J., and in Niagara Falls, N. Y. and branches are operated in Chicago, Boston, Philadelphia, Cleveland, and Gloversville, N. Y.

"Kimco Follies"

The Kimco Club, composed of employees of the Kimble Glass Co., Vineland, N. J., having met with success last year in producing a musical comedy, staged this season a Follies Show consisting of eighteen acts. Over one hundred and fifty members of the club took part in presenting comedy skits, dramatic scenes, soloists, comedians, Hill Billies, and a forty piece band.

Playing to a full house on two evenings, these amateur performers under the professional direction of Edward J. Kidwell, surprised the community with their talent which was of near professional calibre.

Combining entertainment with education, the production offered a dramatic sketch on safe driving, depicting a mother making doll clothes while joyfully awaiting the return of her little daughter from school—then death enters and in its wake follows a man bearing the lifeless form of a child, killed by a drunken driver who is shown in the grasp of an officer.

McGillivray Resigns From Yardley & Co.

T. A. McGillivray recently resigned from the presidency of the Yardley Company of Canada Lt., Toronto, and will henceforth devote his time to the agency products distributed by his own company, McGillivray Brothers, Ltd. The McGillivray line includes numerous products of importance to the trade including "Face-Elle," "Hutax tooth paste, "Musterole," and others.

Policies on Flood Replacements Vary

Replacement of merchandise destroyed or damaged by the recent disastrous floods in the Ohio and Mississippi Valleys has been a problem of some little importance during the last month. Soap manufacturers have generally adopted the formula that merchandise will be replaced when the damaged goods are returned to the factory with the cost of return and re-shipment borne by the retailer. No definite policy has been adopted in the cosmetic industry.

Some of the cosmetic and toilet preparations manufacturers have gone far beyond the soap industry in the liberality of their treatment to the victims of flood waters. In some cases all damaged merchandise, whether returned or not, is being replaced and special dating on new orders is given. Others offer complete replacement without the dating feature, while others adhere rather closely to the policy of the soap industry.

While generosity under the circumstances is indicated, manufacturers have pointed out in some instances that a definite policy should be established by the industry with regard to future flood disasters. It is pointed out that in cases of what may seem to be excessive generosity on the part of manufacturers, merchants will make little effort to save stocks, confining their salvage efforts to stocks of goods on which manfacturers have taken a firmer position.

Macy's Manufacturing Companies Re-organized

The manufacturing affiliates of R. H. Macy & Co., New York department store have been reorganized with Ralph I. Straus as president and Meyer Katz as vice-president of Mabrand Products, Inc., and Cowie & Co., Ltd. It is reported that the companies are planning sale of their products to other than the Macy stores.

Harold Lancaster's Daughter Married

Muriel Daphne Lancaster, daughter of Mr. and Mrs. Harold E. Lancaster, was married last January at Fort Lauderdale, Fla., to Bonnie Jay Ross, of Denton, Texas. Mr. Lancaster is head of the Lan Clamore Cosmetic Laboratories in Chicago.

The young people took a honeymoon trip to Bermuda and the Behama Islands, and plan to spend their winters at Fort Lauderdale and their summers in Washington, D. C.

Son Born to Mr. and Mrs. Felton

Mr. and Mrs. Robert E. Felton have announced the birth of a son, George Ellis, on January 30. Mr. Felton is Southern representative of the Felton Chemical Co., with offices in New Orleans.

New Jersey Machine Expands Sales Staff

The New Jersey Machine Co., Hoboken, N. J., has appointed two new salesmen to work out of the Hoboken office. Richard Dede and Richard Wellbrock have been added to the staff because of steadily increasing business in the company's new "Pony Labelrite."

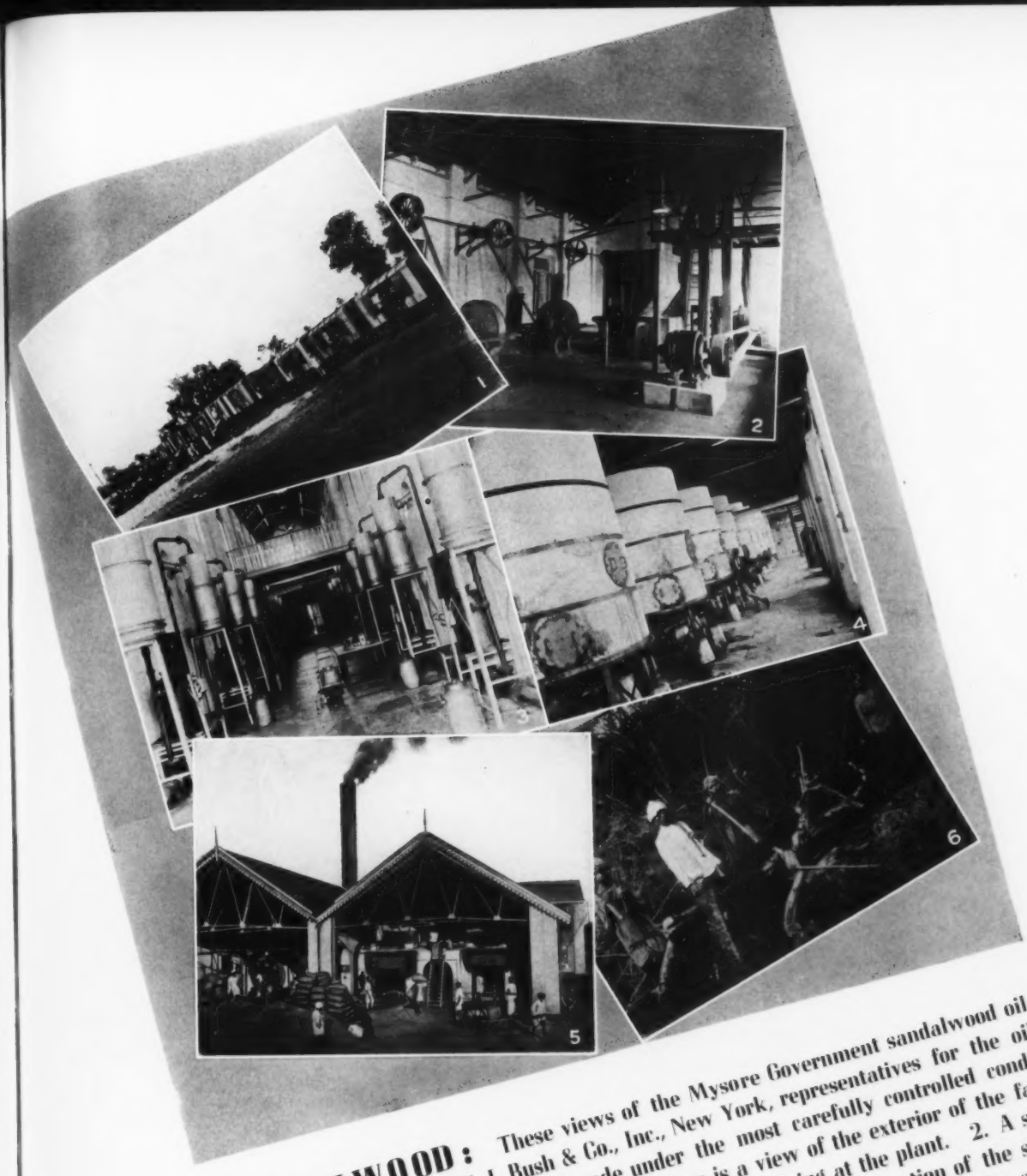




Verley in New Offices

Albert Verley Inc. is now established in its new and larger office and plant at 1621 Carroll Ave., Chicago. New equipment has been installed in the manufacturing plant and laboratories which afford about three times the space available in the former location. Testing rooms are features of the laboratories.

The accompanying photographs (above) of David A. Bennett, president and (below) E. J. Strobl, vice-president, were taken in their commodious private offices which adjoin the accounting and business offices of the company. According to Mr. Bennett the change to larger quarters was necessitated because of an increasing volume of business which has been gaining momentum over the past three years.



SANDALWOOD: These views of the Mysore Government sandalwood oil plant were supplied by W. J. Bush & Co., Inc., New York, representatives for the oil in America. Oil for this market is made under the most carefully controlled conditions at the Bush factory in Linden, N. J. Below is a view of the exterior of the factory in Mysore. Above are: 1. A trainload of wood arriving at the plant. 2. A section of the grinding department. 3. A battery of oil stills. 4. A section of the storage rooms, showing the huge tanks. 5. Ground wood being charged into the stills. 6. Natives cutting the wood under supervision of a member of the Forest Service



d'Orsay Adopts New Distribution Policy

Parfums d'Orsay, New York, has recently announced a new distribution policy for all its products. Distribution of the d'Orsay line will be strictly limited to a carefully selected group of outstanding retail establishments. These will act as the company's agents in their communities, and in consideration of their active co-operation, d'Orsay will work closely with these stores to protect profits and increase sales volume.

Isermann Visits Pacific Coast

Dr. S. Isermann, president of Van Dyk & Co., Jersey City, has just completed a tour of the country which took him as far as the Pacific Coast. Dr. Isermann attended the "Associate Members Night" of the California Cosmetic Association and enjoyed a brief vacation at Catalina Island.

Vanz Laboratories to Promote New Product

"Modoc," a new preparation to restore the natural color to grey hair, is to be manufactured by the newly formed Vanz Laboratories, with plant at 642 Beaubien St. and offices at 1321 Penobscot Building, Detroit. The preparation has been manufactured in Canada for four years under the name of "Angelique," but name is being changed in this country to avoid confusion with another product. There is no connection between the Canadian and American companies. Owners of the business are George A. Slaght, formerly in the cosmetic manufacturing field in Dayton and Rochester, William H. Eby, and Herbert W. Hall.

Burke & Baker Open N. Y. Office

The export firm of Burke & Baker, established for more than fifteen years in Japan, with agencies throughout the Far East, has opened a New York office at 82 Beaver St. Expansion of the company's agencies and personnel now offers its clients a world-wide export sales service, according to J. F. Burke, in charge of the New York office.

Carr on Southern Vacation Cruise

Robert Carr, president of the Association of Canadian Perfumers and Manufacturers of Toilet Articles has just returned with Mrs. Carr from an eighteen day West Indian cruise. Mr. Carr is general manager of the Jergens Canadian company located at Perth, Ont.



A view of the plant of Charabot & Co. in Grasse, France. This is one of the largest and best equipped of the Grasse flower oil factories. Charabot & Co., celebrates its 120th anniversary this year.

Charabot & Co., 120 Years Old

Ungerer & Co., New York, has been advised by its principals, Charabot & Co., Grasse, France, that 1937 marks the 120th anniversary of the organization of that prominent producer of flower products. Its celebration of the event is of particular significance at this time since Charabot & Co. is probably in a better position today than ever before. A loyal and trained personnel, improved technique and equipment, and the world wide reputation of the house for honesty and fair dealing combine to give the house added cause for anniversary celebration.



Sen. Charabot

Recently, certain corporate changes have been made in the Charabot organization, notably the addition of Alexandre Klaguine as managing director. His efforts along with the experience and technical skill of Sen. Eugene Charabot insure excellent working efficiency.

Senator Charabot arrived in America for his annual visit on the *Ile de France* March 9. He will confer with his American representatives, Ungerer & Co., and expects to visit his host of friends in the American perfume and toilet preparations industry.

Calisher Now With Zell Products

Joseph H. Calisher who has been connected with the cosmetic industry for many years is now associated with Zell Products Corp., and will cover the South, Mid-West, New England, Philadelphia, Baltimore and Washington. Mr. Calisher was formerly vice-president of Mondaine Products Co.

Allondon Opens London Office

Usines de l'Allondon, S.A., of La Plaine, Geneva, Switzerland, manufacturers of synthetic perfumes, has recently opened a London office, situated at 5, Dyer's Buildings, Holborn, E.C.1.

Alsop Engineering Corp. in Well Equipped New Plant

The Alsop Engineering Corp., which began business in 1920 in a loft building on Water St., New York, celebrated its 17th



Mr. Alsop



Mr. Crowley

anniversary by moving into its own plant covering 60,000 sq. ft. of floor space on a ten acre plot in Milldale, Conn. From this modest beginning Samuel Alsop has built up an organization which now does a world wide business with representative branches in 35 cities in the United States and 7 foreign countries, including Australia and New Zealand.

Ever since the company was started, Mr. Alsop has designed the machines which bear his name and starting from a small filter, the line now includes mixers, tanks, fillers and other machines used by the cosmetic, pharmaceutical and chemical industries. Among recent buyers are the Egyptian University at Giza and the Government Soap Factory at Bangalore, India.

Several moves preceded the latest one, all brought about by steadily increasing business, first from Water St. to West 53rd St. and later to 38 West 50th St. where the company remained until it purchased its Milldale plant last year. A business and service office is still maintained at 17 West 60th St., New York.

The new plant is three times as large as the old one and is equipped with all modern facilities including natural lighting, water power for its own electricity, oil heat, air conditioning, sprinkler protection. It is on the main highway between New Haven and Hartford and also between Waterbury and Meriden affording excellent trucking and rail facilities.

Manufacturing, assembling, and shipping, as well as executive offices and the private office of Charles E. Crowley, first vice-president and treasurer, are on the first floor, with the laboratories, engineering departments and president Samuel E. Alsop's offices on the second floor. 500 locker rooms, carpenter shops, and garages occupy separate adoining buildings.

Associated with Mr. Alsop for many years have been Charles E. Crowley, vice-president and treasurer to whose industry, skill and foresight Mr. Alsop ascribes much of the success that has come to the company; and Walter Freystedt, second vice-president whose engineering skill has contributed much in the way of refinement to the various machines offered by the company. These men together with B. E. Alsop, secretary comprise the officers of the company, who also are the directors. In addition to his other work Mr. Crowley is general sales manager. Emile Koeb is superintendent of production and James J. O'Shea is in charge of the agitator and mixer division.

Pharmaceutical Specialties Co. Appoints Latin American Agent

Dr. August J. Pacini, president and Kenneth S. Williams, New York manager of the



Dr. Pacini



Mr. Williams

Pharmaceutical Specialties Co., have returned from Havana where arrangements were made to extend the business of the company throughout Cuba, Mexico and the countries of South America. At the head of the new division in charge of sales for the foregoing territory will be Eduardo Odio, Edif. 620, Havana, Cuba.

On his return Dr. Pacini announced that Mary Imogene Shepherd, Ltd., Chicago, Ill., is now offering baby skin soap containing vitamins E and F with a certificate of guaranteed vitamin potency; and that the Larkin Co., Buffalo, N. Y., is now offering vitamized shampoos, toilet creams, shaving creams and brilliantine.

Mabel Ogilvie Visiting in New York

Mrs. Mabel Ogilvie Carter, head of the Paris branch of Ogilvie Sisters, arrived in the United States recently to confer with her sisters and also to see her son who is a student at the Massachusetts Institute of Technology. Before sailing for New York, Miss Ogilvie visited her sister, Miss Elizabeth Ogilvie in London where she spent several enjoyable days. During her stay here, Mrs. Carter is supervising the salon in New York during the absence of Miss Jessica Ogilvie, who is now convalescing from a serious operation. She plans to return to Paris early in the Spring.

Irving Cohen Resings From The Fair

Irving Cohen, buyer and manager of the toilet goods department of The Fair, Chicago, has resigned his position effective April 1 and will after that date take a brief vacation. He does not intend to make any plans for future activities until his return.

Ash Organizes New Company

Sidney Ash, formerly president of the Reich Ash Corp. has organized a company under the name of Lovette at 51 W. 24th St., New York City, manufacturing cosmetics and novelties.

Griffon Returns From Trip to France

Andre Griffon of the French Glass Co., New York, returned late in February from a three months stay in Europe, where he visited the plants of Cristalleries Baccarat, Choisy-Le-Ron, Aunebicque, Brosse and C. Stolgles Sohne which the French Glass Co. composed of Jean Martin and Mr. Griffon, represent in the United States and Canada.

Parfums Weil In Great Britain

Parfums Weil, Paris, Ltd., has been registered as a private company, with a capital of £1,000, with registered offices at 27, Old Bond St., London, W. The objects of the company are to carry on the business of manufacturers of and dealers in perfumes, cosmetics, toilet requisites, oil and soap products, etc.

Q&A

This department is devoted to answers to inquiries submitted by our readers. We invite members of the industry to avail themselves of this service. Answers will be published as rapidly as space permits. We shall be glad to reply promptly by mail to any reader who will enclose a self addressed envelope with his query.

99.—BATH OIL FORMULA

Q. Will you be good enough to submit formula on the product known as "Bath Oil" in the trade, and also one for liquid water softener. A stamped envelope is enclosed.—B. R. N., La.

A. Since you ask for a water softener formula too, we take it for granted that you refer to that type of "Bath Oil" sometimes so labelled, but which really is a body oil. Such a body oil can be made from cold mixture of oils as follows: 490 parts of peanut oil and ten parts of perfume are mixed in the cold. Another formula calls for similar ingredients but in addition it contains 20 parts of lanolin as a nutrient. Other formulas use olive oil in place of peanut oil. A liquid water softener can consist of:

Sulfonated castor oil 75% .65 parts
Wetting agent .....33 "
Perfume ..... 2 "

You can increase the amount of perfume if you wish. Tyrolean pine oils are pleasing in this type of product. For additional data on this type of product you might consult the *Bulletin* on *Wetting Agents*, sent by *The American Perfumer* to those asking for it. It is free. Just drop a postal card in the mail box, asking for this bulletin.

100.—PROTECTIVE CREAM

Q. We are interested in making a cream for protecting the skin, similar to "Protex." Enclosed is stamped envelope for your reply.—D. V. R., Georgia.

A. We do not know the composition of "Protex." However, preparations of this type are so formulated as to be insoluble in the usual organic solvents, but readily soluble in water. Such a product can be based on any water soluble material having bulk, such as soap, gums, gelatin and other similar ingredients. Since the sole purpose of the product is to protect the skin, using a sufficiency of the above materials to give a solid, usable product of creamy appearance, is all that is necessary. Let us know how you come along.

101.—BODY OIL

Q. If you can furnish us with a good formula for body oil, we shall be glad to have it.—S. T. S., Michigan.

A. Vegetable oils are usually the basis of body oils. Sometimes, materials like cetyl alcohol, lanolin or cholesterin in amounts from 0.5% to 2% are also added. Color and perfume to suit. Pine is popular. When using olive oil, simply remember that the best *virgin* grade is not as readily oxidized (turn rancid) as ordinary grade. If materials such as cholesterin or cetyl alcohol are added, these must be dissolved with the aid of heat. Heat only a part of the oil with the solid substance, and when solution is affected, *remove from heat* and add the rest of the oil with stirring. Perfume and color.

102.—SPECIAL SHAMPOO

Q. I wish you people could send me or have put in your column, a rich lathering shampoo capable of washing out ointments from scalps, if this is possible.—B. R. A., Arizona.

A. Triethanolamine has been described in the *Archives of Dermatology and Syphil.* recently, as well as in the *N. N. R.* This material gives useful shampoos for the purpose you have in mind. Try the following: White oleic acid....55 grams, coconut fatty acids....40 grams, triethanolamine....53 grams, carbitol.... 55 grams. Add water to suit your taste. To make, bring all the materials up to about 140° F. and mix. Water if added, should be heated to same temperature, before adding. If you like, as much as 20% oil of cade can be added to 80% of the above formula.

103.—MATERIALS CAUSING HAIR GROWTH

Q. I am anxious to check some conclusions regarding why some creams cause the growth of hair. With this in mind I will appreciate it if you will indicate which of the following cream constituents and mixtures cause hair growth on the face, neck and arms? (List of 18 materials, follows.) I.H.P., Mo.

A. So far as we know, it has never been demonstrated that any product applied externally will promote the growth of hair. With special reference to a few of those which you mention, we might say the following: 1) Beeswax: There is no evidence that this promotes growth of hair, and since it is an ingredient of all cold creams which have been used for many years, it would seem that there would be some evidence if beeswax did promote hair growth. 2) Lanolin: Because of its content of cholesterin, this product is believed by some authorities to promote hair growth. However, there is no evidence that lanolin applied without other material has actually grown hair. 3) Lecithin: We know of no authority that claims that lecithin promotes hair growth, although some advise its use along with cholesterin in preparations intended for this purpose. 4) Cholesterin: Several European authorities believe that this has a definite effect upon the growth of the hair, and it is recommended as an ingredient for hair tonics and hair creams on this account. There is very little evidence that external application of cholesterin will actually promote the growth of the hair. 5) Your Cream Mixture: On account of its cholesterin content, this mixture would be considered by some authorities as a product promoting hair growth. In our opinion, however, such claims could not be justified for the product.



SMART

MODERN

DURABLE

PRECISE

UNIFORM

COLORFUL

TURNER TUBES

TURNER WHITE METAL CO. Inc., New Brunswick, N. J.

Manufacturers of Collapsible Tubes Since 1898

NEW YORK MARKET REPORT

ALTHOUGH the feverish condition which has existed among consumers of essential oils, and other articles used in the manufacture of toilet preparations and perfumes was not as great as it was at the beginning of the year, nevertheless the continued upward trend in prices tended to create considerable attention.

Even though a portion of the initial spring buying movement has been passed, certainty of price advances is causing sustained interest in a number of major articles. There was nothing unusual to report in the movement of aromatic chemicals. Manufacturers were in most cases only able to point to a regular routine movement of merchandise, but interest in specialties, and imitation flavors was keen with indications pointing to an active season ahead.

Some items were reactionary. The outstanding illustration of this reversal of conditions were anise oil, citronella and lemongrass. The lower prices on anise came as a surprise to some yet dealers explained that such a reversal in the trend was largely due to a few arrivals here rather than by any material change in conditions at the source.

Against this angle of the market were substantial advances in Turkish geranium, wormseed, clove, mace, nutmeg, ginger, and cardamon. Turkish geranium oil was in low supply on spot, and consequently the market here responded very quickly to the sharp advances in shipping prices. The source reports the crop as fully 30 per cent under average. Raw material was still productive of a high cost to produce clove oil, and present indications do not forecast any early reversal in the trend.

Prices on lemon oil were well maintained, the market being supported by the fact that the crop is very small. The high prices have checked buying and have caused makers of imitation oil to push their product more actively. Italian orange oil appeared to be very steady, but bitter West Indian oil was firmer, and only small quantities of California oil were offered. Exports of citrus oils in 1936 amounted to 284,993 pounds valued at $345,461 in contrast to 337,000 pounds valued at $283,000 during 1935 and 109,000 pounds, with a value of $93,000 in 1934.

Following a reactionary trend, cocoanut and palm oils staged a slight recovery toward the latter part of the month. There was considerable discussion as to the reason for the stronger market. However, it was pointed out that tallow recently recovered from its decline and that other soap ingredients were generally in a strong statistical position. Demand for palm oils was reported as very good.

In keeping with most Japanese products, menthol displayed considerable strength over the greater part of last month. Mixed reports were current about the demand but on the whole the movement was said to be about normal.

Export statistics issued by the Department of Commerce last month merely confirmed the fact that business over the past year was considerably more active than the preceding period. On only four other occasions during the past fifteen years has the value of United States essential oil exports been greater than during 1936 when it equalled $1,119,000. The quantity, however, was only 1,441,000 pounds, including 150,000 pounds of blended, compounded and mixed oils valued at $349,000 and 31,000 pounds of spearmint oil valued at $56,000. The essential oils dealt with excluded peppermint oil, and included orange and lemon in the years 1922 to 1928, but excluded them thereafter.

The group of balsams was featured by a steady rise in Copaiba. Little or nothing was offered for shipment. Detailed reports from the source pointed out that gatherers have neglected the articles.

PRICES OF SOAP MATERIALS

TALLOW AND GREASE

Tallow, N. Y. C. extra	$ .08¾	@	.09½
Edible	.10¼		Nominal
Fancy	.13	@	
Grease white	.08⅞	@	.10
House	.08½	@	.08⅝
Yellow	.08½	@	.08⅝
Lard	.13¾	@	.14

FATTY ACIDS

Coconut Oil, tanks	.14¼	@	
Corn Oil, tanks	.13		Nominal
Red Oil, distilled, tanks	.10¾	@	
White, drums	.13½	@	.14½
Stearic Acid, s'gle prs., c.l.	.12	@	.13
Double pressed	.12½	@	.13½
Saponified	.12¾	@	.13¾
Triple pressed	.15¼	@	.16¼
Saponified	.15½	@	.16½

SOAP MAKING OILS

Castor No. 1, tanks	.10	@	
No. 3, tanks	.09½	@	
Coconut, Manila Grade, tanks	.09½		Nominal
Corn, crude, Midwest mill, tanks	.10¼		Nominal
Cotton, crude, Southeast, tanks	.09¾	@	
Refined	.12½	@	.12¾
Lard, common No. 1 bls.	.12¾	@	
Foots, barrels	.13		Nominal
Palm, softs, drums	.05⅞	@	
Niger, casks	.06¾		Nominal
Palm, kernel, tanks	.07⅜		Nominal
Peanut, crude, tanks	.10¼		Nominal
Refined, barrels	.13½		Nominal
Soya beans, mill, tanks	.10½		Nominal
Tallow, acidless, barrels	.12⅝	@	
Whale, Crude No. 1, Coast, tanks	.08½	@	
Refined, barrels	.10⅛	@	.10⅜

GLYCERINE

C. P., drums extra	.29	@	.29½
Dynamite, drums extra	.29	@	.29½
Saponification, drums	.25	@	.27
Soap, lye	.23	@	

ROSIN

Barrels of 280 pounds

B	$9.90	K	$11.25
D	10.25	M	11.25
E	10.70	N	11.25
F	11.25	W. G.	11.50
G	11.25	WW.	13.25
H	11.25	X	13.35
I	11.25	Wood	11.25

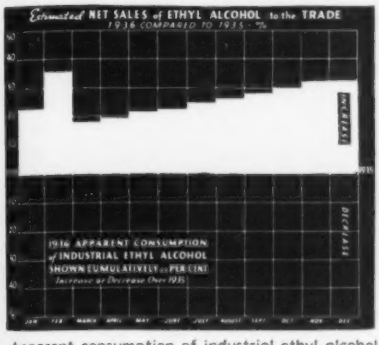
CHEMICALS

Acid, muriatic, 18°, 100 pounds	$1.00	@	$2.35
Sulfuric, 60°, ton	12.00	@	20.50
66°, ton	15.50	@	25.00
Borax, crystals, carlot, ton	42.00	@	71.00
Cyclohexanol (Hexalin)	.30	@	
Naphtha, cleaners, tk. cars	.09½	@	.10
Potassium carbonate, 80@85%	.07	@	
Hydroxide, 88@92%	.07¼	@	
Salt, works, ton	11.50	@	14.00
Sodium carbonate 58% light, 100 pounds	1.23	@	2.37
Hydroxide 76% solid, 100 pounds	2.60	@	3.75
Silicate 40°, drums, works, 100 pounds	.80	@	
Sulfate, anhydrous	.02¼	@	.03
Phosphate, tri-basic	.02½	@	.03
Zinc oxide U.S.P., bbls.	.08	@	.08¼

ADVERTISEMENT—*This entire page is a paid advertisement.* *Prepared Monthly by the U. S. Industrial Alcohol Co.*

ALCOHOL NEWS

March ★ A Monthly Series of Technical Articles for Chemists and Executives ★ 1937



Apparent consumption of industrial ethyl alcohol from Jan. 1 to Dec. 31, 1936, was 81,386,000 wine gallons. This is 33.5 per cent greater than during the same period in 1935 when 60,951,000 wine gallons were consumed.

ETHYL ESTERS ARE AIDS IN STUDY OF KETONURIA

In studying the ketosis induced in rats by the administration of certain ethyl esters, four chemists using ethyl acetoacetate controls were able to throw fresh light on the mechanism of ketonuria.

While the administration of ethyl acetoacetate, butyrate or caproate to fasting rats resulted in a uniform ketonuria lower than that produced by the corresponding sodium salts, more than double the ketonuria was observed after use of the ethyl esters of caprylic, capric, lauric and myristic acids.

Formation of Acetone Bodies

To explain this, it was suggested that two fragments capable of forming acetone bodies are produced per molecule of fatty acid. Likewise, with the ethyl esters of palmitic, stearic and oleic acid, it was thought that these fatty acid molecules must break up into at least three fragments per molecule.

Since ethyl caprate was observed to be as good a ketogenic agent as ethyl caprylate, this was taken as indication that its chief method of oxidation is to acetone bodies rather than to the dicarboxylic acids as postulated by previous workers.

SOLOX IS USED TO CLEAN ELECTRICAL EQUIPMENT

Cleaning motor windings and other electrical equipment has been suggested as a new use for Solox*. According to "Power" magazine, water must never be used for this purpose. After loose dirt has been blown out by compressed air, the remaining oil and dirt can be loosened with Solox. An ordinary hand fire extinguisher may be used to apply the Solox. A second application of the air blast removes the loosened dirt.

Reasonable care should be practiced when using Solox in a confined space or near a flame. Under ordinary conditions it is a convenient, quick, and inexpensive fluid, evaporates readily and leaves the machine ready for service immediately after cleaning.

* Proprietary alcohol-type solvent manufactured by U.S.I.

An obdurant to sensitive dentine—i.e., a drug to deaden pain in the teeth—was reported recently. It is described as a mixture of thymol 4 drams, benzocaine 28 grains and methyl acetone 52 minims.

RING FREEZING GIVES PURER FRUIT JUICES

Freezing in Annular-Cell and Centrifuging Is Said To Speed Water Removal

Interest in the concentration of food and beverage products was revived recently by the announcement of an improved process for dewatering by freezing. When the ice crystals are allowed to grow in an annular or ring-shaped cell a texture of slush is said to result which greatly aids separation of the ice by centrifuging. A more concentrated extract and purer water melt is obtained, according to reports.

Application to Grape Juice

When the process was first industrially applied (to grape juice) the water from the melted ice was found to have valuable medicinal properties. A number of European clinics are now making tests to determine the therapeutic value of this product from grapes.

The newly-developed process involves freezing the juice at —13 deg. F., followed by centrifuging. This may be repeated once or twice, according to the concentrate desired.

MODIFY ESTIMATION OF FREE ALKALI IN SOAP

Authors Report Special Solvent Mixture Gives Sharper Endpoint

By dissolving soap in a special solvent mixture composed of 100 parts of benzene, 75 parts of alcohol, and 2½ parts of water by volume, the authors of a new method for the determination of free alkali in soap report a sharper endpoint.

Titration is carried out at room temperature with n/10 acid and phenolphthalein as the indicator. While the new method gives initial results differing from those provided by the

(Continued on next page)

DIBUTYL OXALATE IS NEW U.S.I. PRODUCT

Companion to Diethyl Oxalate Is Useful in Organic Synthesis And as Special Solvent

With the addition of Dibutyl Oxalate to its line, U. S. I. now offers a companion product to its Diethyl Oxalate.

Like the latter product, dibutyl oxalate is an intermediate in chemical manufacture as well as a solvent for specialized uses. Compared with Diethyl Oxalate, it is characterized by a much higher boiling range, lower water solubility and less density.

Three grades having ester contents of 90 per cent, 95 per cent, and 99 to 100 per cent respectively are available. The specifications for the 99 per cent grade are as follows:

ACIDITY (Free acid as oxalic), Not more than 0.05%
COLOR ..... Water White
DISTILLATION RANGE:
Below 240° C. ..... Not more than 5%
Below 248° C. ..... Not less than 90%
Above 255° C. ..... None
DRYNESS—Miscible without turbidity with 20 vol. 60° Be. gasoline at 20° C.
NON-VOLATILE MATTER— Not more than 0.005 g./100 cc.
ODOR ..... Mild
PURITY—Ester content as Dibutyl Oxalate, Not less than 99%
SPECIFIC GRAVITY at 20/20° C., 0.989-0.993
WEIGHT PER GALLON at 20° C., 8.24 lbs. (approximate)
BLUSH RESISTANCE at 90° F. (10% R.S. ½ sec. Nitrocellulose Solution) Clear at 90% Relative humidity.
COEFFICIENT OF EXPANSION:
Per 1° F. 0.00053
Per 1° C. 0.00095
DILUTION RATIO (Nitrocellulose Method):
With Toluol 2.3
With Petroleum Naptha 1.0
FLASH POINT ..... 265° F. (approximate)
VISCOSITY expressed in centipoises (10% ½ sec. nitrocellulose solution) 800
WATER SOLUBILITY: At 25° C. 100 cc. solvent dissolves 0.5 cc. water.

PART OF U. S. I. ESTER DISTRIBUTING SYSTEM



From the above scene at the Baltimore plant of the U. S. Industrial Chemical Co., Inc., leave tank cars carrying U. S. I. ester solvents to all parts of the country. Pioneering in the manufacture of esters and other solvents, U. S. I. has been steadily augmenting the number of such products. Dibutyl oxalate is U. S. I.'s latest ester development.

ADVERTISEMENT—*This entire page is a paid advertisement.*

MANILA SCIENCE BOARD SCANS CINCHONA CROP

Fear Effect of Plant Disease On Malaria Drug Cultivation

At least 10,000 kilos of cinchona bark have been harvested from the government-sponsored project in the Philippine Islands, according to a report by the Chemical Division of the Bureau of Foreign and Domestic Commerce. The growing of cinchona trees in the Province of Bukidnon, started in 1927, was gradually enlarged until there were at least 88,000 trees. At present only about 39,000 from 2 to 7 years old are left and there are about 110,000 seedlings, from 2 to 6 months old.

Affects Bark

It is feared that the same plant disease that destroyed the coffee industry may reappear and affect the cinchona plantation. The bark of trees affected by this disease is utilized for the manufacture of totaquina, a new Philippine medicine for treating malaria.

The Bureau of Science at Manila reports that Philippine cinchona has a higher alkaloidal content than barks obtained elsewhere.

VIENNA ANNOUNCES NEW TECHNIC FOR SPRAINS

Immediate relief from the pain of mild sprains is obtained by a new method of treating such injuries, according to two Viennese doctors. The technique of one is first to freeze the painful region with ethyl chloride and then have the patient perform the movements he previously found impossible.

The mildly frozen skin is greased and the patient continues the exercise at home, three or four times a day, using alcohol and steam compresses for anesthesia.

Hypodermic injections of 12 to 25 cc. of 1 per cent novocaine solution is substituted by the second physician for the ethyl-chloride freezing treatment. The rest of the procedure is substantially the same.

A folder giving the history and uses of industrial alcohol, a pictograph of its manufacture and a summary of government regulations has been prepared by U. S. I. Write for your copy.

New Lab Use For Solox

Boring holes in rubber stoppers may be simplified by using Solox, U.S.I.'s proprietary alcohol-type solvent, as the lubricant. Experimenting with the usual lubricants, glycerine, alkali and soap solutions, one technician found that alcohol was most satisfactory since it evaporated quickly leaving a clean dry stopper.

Alcohol Is Heat Transfer Fluid in New Radiator

Taking advantage of the good heat-transfer characteristics of alcohol, an "alcohol steam radiator" has been developed. One or two pints of alcohol are placed in a "bottle" which takes the place of the cut-off valve on an ordinary radiator. The alcohol is vaporized and heated by a live steam jacket enclosing the bottle, then flows through the radiator where the alcohol vapor condenses and falls into a small reservoir beneath the radiator. By suitable mechanism, the liquid alcohol is returned to the bottle for reheating.

Advantages claimed for the device are elimination of valves and smoother regulation of radiator temperature; both said to be important in air-conditioning installations.

MODIFY ESTIMATION OF FREE ALKALI IN SOAP

(Continued from preceding page)

A.O.C.S. method, the absolute alcohol and the barium chloride methods, it is asserted that all four analyses may be made to agree if corrections are made for the solubility of sodium carbonate in the various solvents and for the temperature coefficient of the endpoint.

It is said that the new method also has the advantage of allowing removal of soap builders, exclusive of sodium silicate, by centrifuging, thus eliminating any effect on the free alkali such as may be experienced in filtration procedures.

FOOD INDUSTRY WATCHES MOVE TO STERILE AIR

Sterile air at a reasonable cost is now available to food manufacturers according to the patentee of a process for sterilizing air by compression and expansion. Beverage bottlers, confectioners, syrup makers and many others have long known of the advantages of sterile air for transferring and agitating liquid foods but the cost has heretofore been prohibitive.

Uses Expanding

Although this sterilization process has been used by breweries and dairies for a number of years, it is only now being introduced to the food industries.

The method consists of compressing air to about 45 lbs. per sq. in. with subsequent expansion through several successive steps to about 37 lbs. per sq. in. The sterilization unit used in one brewery consists of four expansion tanks 8 ft. high and with 6, 8, 10 and 24-in. diameters respectively connected in series and three sterile air reservoir tanks with connecting pipes and needle valves to regulate the flow of sterile air to each tank as well as to each department in which it is to be used.

TECHNICAL DEVELOPMENTS

The items in this column are gathered from many varied sources. Further information may be gathered by writing to U.S.I.

"Gold plate," various blue, green and red effects are said to be imparted to lacquered articles by means of a novel dipping water dye. It is reported that the shades obtained may be varied by regulating the period of immersion in the dye solution. Safety razors, novelty jewelry and ornamental articles are listed as some of the applications.

U S I

Heather perfume, a new type aroma for use in both creams and perfumes, was recently placed on the market. It is said to be particularly useful for covering raw materials and to provide a pleasant, lasting aroma as well.

U S I

A portable pressure-spray cleaning machine is now available. The unit is said to deliver a steam-heated solution under pressures ranging from a penetrating spray to a solid stream of water.

U S I

A synthetic wax said to have the characteristics of carnauba wax was announced recently. It is reported useful for making stable water-wax emulsions which leave a hard, water-resistant, transparent film when coated on a clean surface.

U S I

Uniform granules or nodules are formed from damp or dry products by a new oscillating granulator, according to the manufacturer. The new machine is said to be particularly useful in conditioning filler cakes before drying and for coarse grinding of certain chemical powders.

U S I

Pearly effects in vanishing creams are more easily produced with a new chemical, according to the manufacturer's announcement. It is described as an entirely neutral, water-insoluble and non-irritating material, which melts at 43 deg. C.

U S I

An improved vacuum filler recently introduced is reported to have many advantages. Among these are faster filling, flexible capacity (a second filling head can be added if desired), less overflow and no dripping.

U S I

A new seasoning of vegetable origin for sausages and prepared meats has been developed. According to the manufacturer, the vegetable material improves taste and flavor, prevents acidity and increases food value.

U S I

An extrusion press now on the market is said to be useful for extruding eyebrow pencils, suppositories, etc., on a small scale.

U S I

A smooth, invisible film is said to form on the face when a newly patented liquid is used. The cosmetic preparation consists of three parts of fresh, uncooked egg albumen and one and a half parts of 70 per cent alcohol.

U.S. INDUSTRIAL ALCOHOL CO.

WORLD'S LARGEST PRODUCERS OF INDUSTRIAL ALCOHOL

ETHYL ALCOHOL

SPECIALLY DENATURED—*All Formulas* • COMPLETELY DENATURED—*All Formulas* • ANHYDROUS—*Denatured* • ABSOLUTE—*Pure*

SOLOX—*The General Solvent* • U. S. DENATURED ALCOHOL • SUPER PYRO *Anti-Freeze*

PURE (190 PROOF) TAX PAID—TAX FREE

U. S. I.—U. S. P.—*Ethyl* • WEBB'S—*Ethyl*

Executive Offices: 60 East 42nd Street, New York, N. Y. Branches in all Principal Cities.

PRICES in the NEW YORK MARKET

(Quotations on these pages are those made by local dealers, but are subject to revision without notice)

ESSENTIAL OILS

Almond Bit., per lb.	$2.25@	$3.00
S. P. A.	2.50@	3.05
Sweet True	.80@	.85
Apricot Kernel	.26@	.30
Amber, crude	.23@	.27
rectified	.52@	.60
Ambrette (oz.)	46.00@	
Amyris balsamifera	3.00@	3.25
Angelica root	75.00@	
seed	90.00@	
Anise, U. S. P.	.90@	.95
Araucaria	1.75@	1.85
Aspic (spike) Span.	1.35@	
French	1.55@	
Balsam, Peru	5.50@	6.25
Balsam, Tolu, oz.	4.25@	
Basil (oz.)	2.35@	
Bay	1.45@	1.60
Bergamot	3.50@	4.25
Birch, sweet N. C.	1.90@	2.00
Penn. and Conn.	3.75@	4.00
Birchtar, crude	.15@	.18
Birchtar, rectified	.80@	.90
Bois de Rose	1.35@	2.75
Cade, U. S. P.	.45@	.55
Cajeput	.45@	.67
Calamus	3.50	Nom'l.
Camphor "white"	.20@	.22
Cananga, Java native	2.00@	2.40
rectified	2.30@	2.85
Caraway	2.05@	2.20
Cardamon, Ceylon	30.00@	38.00
Cascarilla	55.00@	75.00
Cassia, 80@85 p.c.	.95@	1.00
rectified, U. S. P.	1.10@	1.25
Cedar leaf	1.00@	1.05
Cedar wood	.24@	.26
Cedrat	4.15@	
Celery	12.00@	14.50
Chamomile (oz.)	4.75@	7.00
Cherry laurel	14.00@	15.00
Cinnamon, Ceylon	8.00@	20.00
Cinnamon, Leaf	6.50@	10.00
Citronella, Ceylon	.45@	.50
Java	.46@	.50
Cloves Zanzibar	1.20@	1.30
Cognac	16.00@	20.00
Copaiba	.45@	.50
Coriander	20.00	Nom'l.
Croton	1.40@	1.50
Cubebs	3.05@	3.30
Cumin	8.75@	9.00
Curacoa peels	4.85@	5.25
Curcuma	3.00@	
Cypress	12.00@	
Dillseed	3.25@	4.25
Elemi	1.65@	
Erigeron	1.45@	1.55
Estragon	32.00@	35.00
Eucalyptus	.46@	.50
Fennel, Sweet	1.10@	1.20
Galangal	35.00@	
Galbanum	15.00@	
Geranium, Rose		
Algerian	4.80@	5.75
Bourbon	4.55@	4.85
Spanish	12.00@	
Turkish	3.00@	3.75
Ginger	6.95@	9.00
Gingergrass	3.00@	3.75
Grapefruit	2.00@	2.85
Conc.	24.00@	
Guaiac (Wood)	$3.10@	$3.50
Hemlock	1.05@	1.25
Hops (oz.)	8.50@	13.00
Horsemint	2.50@	
Hyssop	40.00@	50.00
Juniper Berries	1.05@	1.50
Juniper Wood	.50@	.60
Laurel	8.00@	10.00
Lavender, English	32.00@	
French	3.50@	7.50
Lemon, Italian	4.00@	4.75
Calif	3.50@	
Lemongrass	.58@	.65
Limes, distilled	5.75@	7.00
expressed	10.25@	12.00
Linaloe	1.30@	1.40
Lovage	65.00@	72.00
Mace, distilled	1.20@	1.30
Mandarin	4.50@	6.75

(Continued on page 97)

★ RESIN AMBRETTE

Is not too expensive to be used in large quantities but only small amounts need be added to your present odor as a modifier or improver. Its true value lies in its marvelous fixative properties.

METHYL NAPHTHYL KETONE *of absolute purity*

A basic aromatic chemical found to be most useful for imparting a desirable orange blossom odor. ¶ Write us for quotations and also for information on other Vanillin Fabrik products.

PRODUCT OF VANILLIN FABRIK

P. R. DREYER INC.

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HOUSTON, TEXAS
DES MOINES, IA.
PHILADELPHIA, PA.



Have the "Puff Sheet" boys tried to nick you?

Better phone us before you sign a check

AN EXECUTIVE of a firm that joined the National Better Business Bureau telephoned a few days later for information on a magazine that offered him some free publicity.

The offer looked all right, but he wanted to make sure.

We knew the "magazine"—another puff sheet. We explained the puff sheet racket. Our new member was pretty thankful, for within a week he had saved double the amount of his subscription.

This is one of the services available to business firms at all times. Our file records, including many thousands of cases, come close to covering all the frauds there are.

Some of them seem quite legitimate. They don't look like frauds at all. But usually it pays to ask the National Better Business Bureau **first.**

* * *

The National Better Business Bureau is a non-profit agency maintained by more than 600 business firms to help national advertising regulate itself and to promote public confidence in advertising and selling. It is supervised by a Board of Directors elected by the membership and serving without compensation. Its staff of experienced executives have no other business connections. It is not a punitive body, and refers complaints to government agencies only in rare cases in which its own efforts fail to get results.

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National Better Business Bureau, Inc.

405 Lexington Avenue, New York City

Please send me a copy of "How You Can Use the National Better Business Bureau."

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*Firm Name*_____

*Address*_____

*City*_____ *State*_____

(Continued from page 97)

Marjoram	6.00@	6.25
Melissa	4.00@	4.25
Mirbane (see Nitrobenzol)		
Mustard, Genuine	8.50@	10.00
artificial	1.95@	2.25
Myrrh	10.00@	
Myrtle	3.35@	3.75
Neroli, Bigarde, P.	98.00@	125.00
Petale, extra	130.00@	155.00
Nutmeg	1.20@	1.30
Nutmeg	1.15@	1.25
Olibanum	5.00@	5.25
Orange, bitter	2.25@	2.60
sweet, W. Indian	2.00@	2.50
Italian	3.00@	4.50
Spanish	2.55@	
Calif. exp.	3.25@	
dist.	.90@	
Origanum, Spanish	1.25@	1.50
Orris root, con. (oz.)	5.25@	5.50
Orris root, abs. (oz.)	35.00@	50.00
Orris Liquid	18.00@	25.00
Parsley	10.00@	11.00
Patchouli	5.00@	8.00
Pennyroyal Amer.	1.85@	2.10
French	1.60@	1.75
Pepper, black	5.25@	6.00
Peppermint, natural	2.30@	2.55
redistilled	2.60@	2.70
Petitgrain	1.10@	1.35
French	2.35@	2.50
Pimento	1.50@	3.50
Pine cones	3.00@	
Pine needles, Siberia	.90@	1.15
Pinus Sylvestris	1.50@	1.70
Pumilionis	1.75@	2.00
Rhodium, Imitation	2.25@	3.25
Rose, Bulgaria (oz.)	6.00@	12.00
Rosemary, French	.60@	.75
Spanish	.65@	.80
Rue	2.20@	2.35
Sage	1.60@	2.00
Sage, Clary	25.00@	30.00
Sandalwood, East India	5.50@	6.00
Australia	5.75@	
Sassafras, natural	.85@	1.25
artificial	.36@	.38
Savin, French	1.75@	2.00
Spearmint	2.00@	2.15
Snake root	11.25@	13.75
Spruce	1.05@	1.25
Styrax	6.00@	10.00
Tansy	$3.35@	$3.50
Thyme, red	1.00@	1.10
White	1.05@	1.25
Valerian	14.50@	15.00
Verbena	4.25@	8.75
Vetivert, Bourbon	8.75@	12.50
Java	15.00@	25.00
East Indian	30.00@	
Wine, heavy	1.25@	
Wintergreen, Southern	3.35@	3.75
Penn. & Conn.	4.50@	8.00
Wormseed	2.75@	3.00
Wormwood	3.00@	3.25
Ylang-Ylang, Manila	22.00@	30.00
Bourbon	5.00@	8.00

TERPENELESS OILS

Bay	3.25@	4.00
Bergamot	7.00@	12.00
Clove	4.00@	5.00
Coriander	40.00@	
Geranium	8.00@	12.50
Grapefruit	45.00@	60.00
Sesquiter 'less	85.00@	
Lavender	8.00@	8.50
Lemon	14.00@	24.00
Lime, ex.	54.00@	72.00
Orange, sweet	78.00@	90.00
bitter	90.00@	115.00
Petitgrain	3.25@	3.75
Rosemary	2.50@	4.00
Saga, Clary	90.00@	
Vetivert, Java	35.00@	
Ylang-Ylang	28.00@	35.00

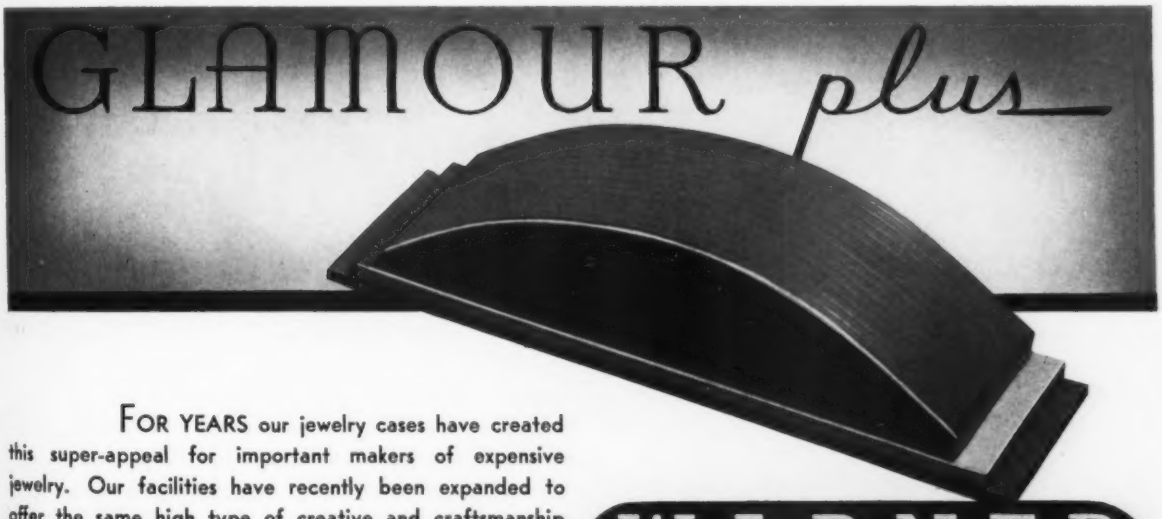
OLEO-RESINS

Benzoin	3.25@	3.50
Capsicum, U. S. P. X.	2.20@	
Alcoholic	3.20@	
Cubeb	2.50@	3.25
Ginger, U. S. P. VIII	3.00@	3.10
Alcoholic	3.75@	4.00
Malefern	1.65@	2.00
Oak Moss	6.00@	15.00
Olibanum	3.50@	
Orris	12.00@	15.00
Patchouli	20.00@	22.00
Pepper, black	4.00@	4.60
Sandalwood	16.00@	
Vanilla	10.00@	11.75

DERIVATIVES AND CHEMICALS

Acetaldehyde 50%	2.00@	
Acetophenone	1.25@	2.00
Acetyl Iso-eugenol	7.50@	8.00
Alcohol C 8	16.00@	20.00
C. 9	26.00@	40.00
C. 10	21.00@	28.00
C 11	20.00@	25.00
C 12	14.00@	25.00
Aldehyde C 8	30.00@	
C. 9	45.00@	70.00
C 10	42.00@	60.00
C 11	33.00@	50.00
C 12	26.00@	32.00

(Continued on page 99)



FOR YEARS our jewelry cases have created this super-appeal for important makers of expensive jewelry. Our facilities have recently been expanded to offer the same high type of creative and craftsmanship service to makers of quality perfumes and toilet preparations—for the production of glamor *plus* containers for single items or for combination and deluxe gift sets. For the unusual in quality-appeal at a reasonable price, confer with us.

"WARNER" patented moulded, metal and paper packages . . . . Ask to see them!

NEW YORK REPRESENTATIVE: RICHARD G. EHRLICH, 11 WEST 42nd STREET • Telephone LAckawanna 4-8218

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AND
PLYMOUTH ORGANIC LABORATORIES · INC ·

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CABLE ADDRESS PARSONOILS, NEW YORK

55 ANN STREET
NEW YORK·N·Y·U·S·A.

PLYMOUTH BIG FOUR

PLYMOUTH Crystal "E" White Oil
Water-white, odorless and tasteless and of U.S.P. Acid Test. Used as a standard by the cosmetic industry for 30 years.

PLYMOUTH Zinc Stearate U.S.P.
Specially manufactured by us for face powder manufacturers. Absolutely white, odorless. Covering 30 years experience this represents the ultimate Zinc Stearate. Also Magnesium.

PLYMOUTH White Cirine Wax
A special grade of White Ceresin Wax prepared for the cosmetic trade. Absolutely white and odorless.

PLYMOUTH Stearic Acid, Triple-pressed
Eastern Distributors for Harkness & Cowing. This is the finest triple-pressed saponified Stearic Acid available from any source. Iodine number 1.5 to 1.75. Extremely pure, odorless.

PLYMOUTH SPECIALTIES

PLYMOUTH Powder Base No. 7
A new raw material for face powder manufacturers. From 5-10% added to your present formula will improve your powder, giving it more adhesiveness, greater spread and covering power.

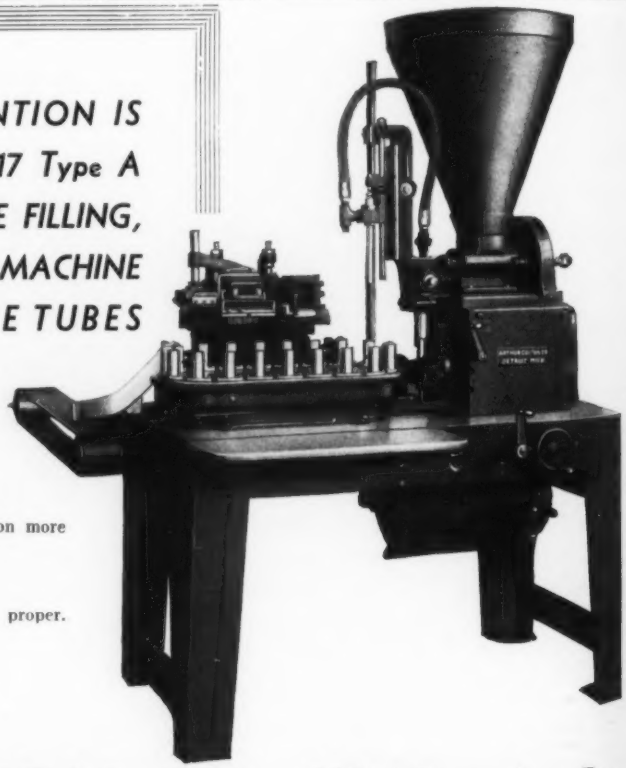
PLYMOUTH Sun-burn Preventer Oil Concentrate
High in effectiveness, low in final cost. Simple to combine in sun-burn preventer oils, creams or lotions. Scientific data covering its use and effectiveness is available.

PLYMOUTH Soapless Shampoo Base
Low in final cost because it will take up greater amount of water and remain perfectly clear and of heavy body. Easy to odor. A combination of soluble Olive and Castor Oils combined with specially treated White Mineral Oil.

ISO-VITAFOL "F" (Vitamin F)
We are marketing the Iso-Vitafol "F" supplied with a biological assay. Also the Plymouth Mineral Oils containing guaranteed 1% of Iso-Vitafol "F."

A complete line of Cosmetic Raw Materials

YOUR IMMEDIATE ATTENTION IS CALLED TO THIS NEW No. 17 Type A IMPROVED AUTOMATIC TUBE FILLING, CLOSING AND CRIMPING MACHINE for SEALING COLLAPSIBLE TUBES



The famous COLTON CLOSURE machine has been greatly improved and simplified. It now offers you these new advantages:

1. Motor is underneath, out of the way.
2. Equipped with REEVES drive for speed control.
3. New design filling head makes machine operation more smooth than before.
4. Start and stop push button switch.
5. Two handy levers. One for starting machine proper. One for stopping starting filling mechanism.

All of these improvements — yet no increase in price. Write today for a sample tube and full information on this machine.

ARTHUR COLTON CO.
2604 Jefferson Ave., East,
DETROIT, MICHIGAN

(Continued from page 97)

C 14 (so-called)	$13.00@	
C 16 (so-called)	13.00@	
Amyl Acetate	.75@	1.00
Amyl Butyrate	1.05@	1.25
Amyl Cinnamate	2.50@	
Amyl Cinnamate Aldehyde	2.50@	3.75
Amyl Formate	1.60@	1.90
Amyl Phenyl Acetate	3.00@	4.00
Amyl Salicate	.80	.90
Amyl Valerate	2.00@	2.40
Anethol	1.20@	1.25
Anisic Aldehyde	3.00@	3.25
Benzaldehyde, U. S. P.	1.30@	
F. F. C.	1.55@	1.90
Benzophenone	1.45@	1.75
Benzyl Acetate	.70@	.85
Benzyl Alcohol	.95@	1.25
Benzyl Benzoate	1.00@	1.80
Benzyl Butyrate	5.00@	6.00
Benzyl Cinnamate	6.00@	8.00
Benzyl Formate	3.50@	
Benzyl Iso-eugenol	11.50@	13.50
Benzylidenacetone	2.50@	4.00
Borneol	1.75@	2.00
Bornyl Acetate	1.50@	5.50
Bromstyrol	4.50@	5.00
Butyl Acetate	.60@	
Butyl Propionate	2.00@	
Butyraldehyde	12.00@	
Carvene	1.15@	
Carvol	4.00@	4.25
Cinnamic Acid	4.00@	
Cinnamic Alcohol	3.40@	3.60
Cinnamic Aldehyde	1.45@	2.00
Cinnamyl Acetate	8.00@	12.00
Cinnamyl Butyrate	12.00@	14.00
Cinnamyl Formate	13.00@	
Citral C. P.	1.95@	2.75
Citronellal	1.00@	1.80
Citronellol	2.00@	2.60
Citronellyl Acetate	3.50@	5.00
Coumarin	3.00@	4.65
Cuminic Aldehyde	35.00@	52.00
Dibutylphthalate	.29@	.35
Diethylphthalate	.32@	.37
Dimethyl Anthranilate	7.00@	8.50
Dimethyl Hydroquinone	2.65@	3.75
Dimethylphthalate	.50@	.60
Diphenylmethane	1.70@	2.25
Diphenyloxide	1.20@	
Ethyl Acetate	.30@	.50
Ethyl Anthranilate	6.25@	8.25
Ethyl Benzoate	1.20@	1.75
Ethyl Butyrate	1.00@	1.25
Ethyl Cinnamate	3.50@	4.00
Ethyl Formate	1.00@	1.25
Ethyl Propionate	1.25@	2.50
Ethyl Salicylate	1.15@	2.50
Ethyl Vanillin	10.75@	15.00
Eucalyptol	.68@	1.00
Eugenol	2.35@	3.25
Geraniol, dom.	1.10@	2.60
Geranyl Acetate	1.70@	3.00
Geranyl Butyrate	6.00@	8.00
Geranyl Formate	5.00@	7.00
Heliotropin, dom.	2.20@	3.00
foreign	2.35@	2.50
Hydratopic Aldehyde	25.00@	27.50
Hydroxycitronellal	2.00@	6.50
Indol, C. P. (oz.)	2.10@	4.50
Iso-borneol	2.30@	
Iso-butyl Acetate	2.65@	
Iso-butyl Benzoate	2.75@	3.25
Iso-butyl Salicylate	3.00@	6.00
Iso-eugenol	3.50@	3.60
Iso-safrol	2.00@	
Linalool	2.10@	4.75
Linalyl Acetate 90%	2.45@	3.75
Linelyl Anthranilate	15.00@	
Linalyl Benzoate	10.50@	
Linalyl Formate	9.00@	12.00
Menthol, Japan	$3.35@	$3.50
Synthetic	2.25@	3.00
Methyl Acetophenone	1.25@	2.00
Methyl Anthranilate	2.25@	3.00
Methyl Benzoate	1.00@	1.75
Methyl Cinnamate	3.00@	3.65
Methyl Eugenol	3.35@	6.75
Methyl Heptenone	2.50@	4.50
Methyl Heptine Carbonate	25.00@	28.00
Methyl Iso-eugenol	7.00@	12.00
Methyl Octine Carbonate	26.00@	32.00
Methyl Paracresol	3.75@	5.50
Methyl Phenylacetate	2.10@	2.75
Methyl Salicylate	.42@	.50
Musk Ambrette	4.45@	4.60
Ketone	4.70@	4.85
Xylene	1.40@	1.55
Nerolin (ethyl ester)	1.50@	1.75
Nitrobenzol	.15@	
Nonyl Acetate	46.00@	48.00
Octyl Acetate	35.00@	40.00
Paracresol Acetate	4.00@	5.50
Paracresol Methyl Ether	3.25@	4.50
Paracresol Phenyl-Acetate	8.75@	16.00
Para Cymene (gal.)	1.25@	1.65
Phenylacetaldehyde 50%	2.75@	6.00
100%	7.00@	10.00
Phenylacetic Acid	2.25@	4.00
Phenylethyl Acetate	3.40@	6.00
Phenylethyl Alcohol	3.00@	4.25
Phenylethyl Anthranilate	16.00@	
Phenylethyl Butyrate	8.00@	12.00
Phenyl Formate	12.50@	18.00
Phenylethyl Propionate	9.50@	
Phenyl Valerianate	16.00@	
Phenylpropyl Acet.	8.00@	11.00
Phenylpropyl Alcohol	4.50@	8.35
Phenylpropyl Aldehyde	8.00@	12.00
Rhodinol	10.00@	18.50
Safrol	.56@	.70
Santalyl Acetate	22.50@	
Skatol C. P. (oz.)	6.00@	9.00
Styralyl Acetate	10.00@	15.00
Styralyl Alcohol	20.00@	

(Continued on page 101)

FOLLOW the EXAMPLE

of *leading* makers of fine creams and cosmetics — standardize on WHB Super-Bleached 100% Pure White Beeswax.

These firms do not "shop around." They know the importance and economy of standardizing on the best—a 100% Pure White Beeswax that never disappoints — that can always be relied on for uniform quality and unvarying results.

A complimentary sample box is yours for the asking. Write for it today!



The W. H. BOWDLEAR CO.

HEADQUARTERS FOR ALL KINDS OF WAX FOR COSMETICS

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- CHICAGO: Riviera Products Co., 215 W. Ohio St.
- DETROIT: J.L. Matthieu Sons, 1383 Cadillac Blvd.
- SAN FRANCISCO: H. R. Laist Co., Rialto Bldg.

This 100% Beeswax is *correctly* processed from *correctly chosen* crudes . . . bleached by masters in the art of bleaching beeswax, the result of nearly a half century of experience.

ESSENTIAL OILS

we have been supplying the

careful buyer

for three score years:

Oil Bay
" **Bois de Rose Brazilian**
" **Cassia Redistilled U. S. P.**
" **Cananga Rectified**
" **Geranium African**
" **Geranium Bourbon**
" **Lemon Italian**
" **Orange Italian**
" **Peppermint Natural**
" **Peppermint Redistilled**

•

Vanilla Beans

We carry complete stocks of the various qualities, and will be happy to submit samples and quotations at your request.

Tonka Beans

We cordially invite your inquiries.

ARTHUR A. STILWELL & CO.
INCORPORATED
· IMPORTERS · EXPORTERS · MANUFACTURERS ·
601 W. 26th ST. NEW YORK
350 N. CLARK ST. CHICAGO
"AN UNIMPAIRED RECORD SINCE 1878"

AMYL BUTYRATE NORTHWESTERN

MADE from our own fermentation Butyric Acid and from Amyl Alcohol made from grain. Bland, smooth, sweet; it is of outstanding quality.

THE NORTHWESTERN CHEMICAL COMPANY
INCORPORATED 1882
The Largest Makers of Butyric Ether in the World
WAUWATOSA WISCONSIN

(Continued from page 99)

Terpenyl Acetate	1.00@	1.50
Terpineol, C. P.	.26@	.38
Thymene	.45@	
Thymol	1.55@	1.65
Vanillin (clove oil)	3.65@	5.15
(guaiacol)	3.55@	5.05
Vetiveryl Acetate	30.00@	38.00
Violet Ketone Alpha	5.00@	10.00
Beta	5.50@	8.00
Methyl	5.25@	8.00
Yara Yara (methyl ester)	1.50@	1.75

BEANS

Tonka Beans, Para	1.25@	1.40
Angostura	2.50@	2.75
Vanilla Beans		
Mexican, whole	4.00@	4.50
Mexican, cut	3.75@	4.25
Bourbon, whole	4.00@	4.50
South American	3.50@	3.75

SUNDRIES AND DRUGS

Acetone	.06@	.08
Alcohol, 190-pf. gal.	4.17@	4.42
Almond meal	.21@	.25
Alum, potash	.03¼@	.03½
Aluminum chloride	.10@	
Ambergris, ounce	25.00@	35.00
Balsam, Copaiba	.48@	.50
Fir, Canada, gal.	9.50@	12.00
Oregon	3.25@	3.75
Peru	1.20@	1.30
Tolu	.55@	.57
Beeswax, white	.40@	.45
yellow	.30@	.32
Bismuth sub-nitrate	1.35@	1.40
Boric Acid, ton	125.00@	140.00
Calamine	$.16@	.20
Calcium, phosphate	.08@	.08¾
Phosphate, tri-basic	.13@	.15
sulphate	.03¾@	.04
Camphor	.56@	.65
Cardamon seed	1.20@	1.75
Castoreum	16.00@	18.00
Cetyl Alcohol	.75@	1.50
Pure	1.90@	2.15
Chalk, precip.	.03½@	.06½
Cherry laurel water, gal.	1.25@	
Citric acid	.25@	.25½
Civet, ounce	4.00@	4.50
Clay, Colloidal	.03@	.03½
Cocoa butter lump	.28@	.30
Fatty Acids (See page 90)		
Formaldehyde	.06@	.06¼
Formic Acid	.12@	.16
Fuller's Eearth, ton	15.00@	33.00
Guarana	.70@	.85
Gum Arabic, white	.27@	.30
Amber	.11½@	.13
Gum Benzoin, Siam	1.10@	1.45
Sumatra	.18@	.20
Gum galbanum	.90@	1.05
Gum myrrh	.50@	.62
Henna, powd.	.12@	.18
Hydrogen peroxide	.05@	.08
Kaolin	.06@	.08
Labdanum	3.50@	5.50
Lanolin, hydrous	.17@	.20
anhydrous	.20@	.24
Lavender flowers	.40@	.85
Magnesium, Carbonate	.06¾@	.07½
Stearate	.19@	.25
Sulfate	.02½@	.03
Musk, ounce	15.00@	25.00
Oils, Vegetables (See page 90)		
Oilbanum, tears	.16@	.28
siftings	.08@	.10
Orange flower water, gal.	1.50@	
Orange flowers	.30@	.90
Orris root, powd.	.20@	.75
Paraffin	.04½@	.07
Patchouli leaves	.16@	.20
Petrolatum, white	.07@	.11
Phenol	.16@	.20
Potassium, Carbonate	.14@	.19
Hydroxide U.S.P.	.36@	.37
Quince seed	.75@	1.25
Reseda flowers	1.50@	1.65
Rhubarb root, powd.	.38@	.45
Rice starch	.09	Nom'l.
Rose leaves, red	1.95@	2.15
Rose water, gal.	1.25@	
Salicylic acid	.40@	.45
Sandalwood Chips	.45@	.50
Saponin	1.75@	
Soap, neutral white	.19@	.23
Sodium, Carb. Crys.	.01¾@	.02¼
Phosphate, Tribasic	.03@	.04
Spermaceti	.25@	.28
Styrax	.50@	3.25
Sulfur, precip.	.17@	.20
Tartaric acid	.22¼@	.22¾
Titanium oxide	.20@	.22
Tragacanth, No. 1	2.50@	2.75
Triethanolamine	.45@	.50
Venice turpentine, gal.	.40@	.50
Vetivert root	.30@	
Violet flowers	.95@	1.15
Zinc peroxide	1.10@	1.75
Oxide	.13½@	.15
Stearate	.21@	.28



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PATENT and TRADE MARK DEPARTMENT

Conducted by Howard S. Neiman

THIS department is conducted under the general supervision of Howard S. Neiman, contributing editor on patents and trade marks. This report of patents, trade marks and designs is compiled from the official records of the Patent Office in Washington, D. C. We include everything relating to the four coordinate branches of the essential oil industry, viz.: Perfumes, Soaps, Flavoring Extracts and Toilet Preparations.

Of the trade marks listed, those whose numbers are preceded by the letter "M" have been granted registration under the Act of March 19, 1920. The remainder are those applied for under Act of February 20, 1905, and which have been passed to publication.

Inventions patented are designated by the letter "D."

International trade marks granted registration are designated by letter "G."

All inquiries relating to patents, trade marks, designs, registrations, copyrights, etc., should be addressed to

PATENT AND TRADE MARK DEPARTMENT,
THE AMERICAN PERFUMER,
9 East 38th St., New York City.

Trade Mark Registrations Applied for (Act of Feb. 20, 1905)

These registrations are subject to opposition within thirty days after their publication in the Official Gazette of the United States Patent Office. It is therefore suggested that our Patent and Trade Mark Department be consulted relative to the possibility of an opposition proceeding.

365,220.—See Illustration. Vera P. Togstad, doing business as C. I. Togstad Co., Kokomo, Ind. (Sept., 1923.)—Water softener having incidental properties as a washing and cleaning compound.

369,568.—See Illustration. Florasynth Laboratories, Inc., New York. (May, 1916.)—Food colors, perfume raw materials, perfume oil concentrates, natural floral isolates and synthetic organic chemicals, particularly aromatics.

374,975.—"Libretto de Jeurelle." Maison Jeurelle-Seventeen, Inc., New York. (Jan. 17, 1936.)—Toilet preparations.

379,921.—See Illustration. Joseph B. Bender, doing business as Benco Products, New York. May, 1935.)—Cream shampoo.

379,923.—"Slik."—Joseph B. Bender, doing business as Benco Products, New York. (May, 1935.)—Depilatory cream.

380,181.—"Ivo Cera." Albert Albek, Inc., Los Angeles, Calif. (May 1, 1936.)—Wax in solid form which is soluble in water and used in the preparation of creams such as cold cream, all-purpose cream, vanishing cream, and brushless shaving cream.

381,018.—See Illustration. A. Buchholtz Co., Inc., doing business as Cabiria Co., New York. (1911.)—Hair dressing, hair coloring and hair shampoo.

383,104.—"AMILDA." Naamlooze Vennootschap Pharmaceutische Fabriek A. Mijnhardt, Zeist, Netherlands. (Jan. 1, 1934.)—Creams, oils and powders for the care of the skin, compact powder, rouge, lipsticks and eyebrow pencils, etc.

383,499.—See Illustration. Anthony E. Lavett, doing business as Marvolene Co., Los Angeles, Calif. (July 29, 1936.)—Preparation for the hair and scalp.

383,546.—See Illustration. The Savogran Co., Boston, Mass. (Sept. 21, 1936.)—Cold water soap powder.

383,941.—See Illustration. Pure Solvent Co., Inc., New York. (Aug. 20, 1935.)—

(Continued on page 105)



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(*Continued from page* 102)

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384,405.—See Illustration. Edward G. Bush, Los Angeles, Calif. (Jan. 1, 1935.)—Hair tonic.

384,525.—The O. M. Franklin Blackleg Serum Co., Denver, Colo. (Oct. 1, 1936.)—Eye ointment, antiseptic dusting powder, antiseptic and deodorant.

384,539.—See Illustration. David B. Lesser, doing business as The Benzofoam Products Co., Chicago, Ill. (Jan. 1, 1910.)—Dry cleaning soap.

384,630.—See Illustration. Quality Products Co., Inc., Brooklyn, N. Y. (Oct. 5, 1936.)—Face creams, cleansing creams, face powders, cleansing emulsions, etc.

384,835.—See Illustration. Schiaparelli, Societe Anonyme, Paris, France. (Aug. 30, 1936.)—Perfumes, toilet waters, rouge, lipstick, and face creams.

384,887.—See Illustration. Donna-Lo Laboratories, Inc., St. Louis, Mo. (Oct. 1, 1935.)—Face powder, perfume, soapless shampoo, cod liver oil shampoo, bath oil, rouge, lipstick, skin preparations, facial oil.

384,912.—See Illustration. Cornelius C. Vanderhooven, Asheville, N. C. (Oct. 26, 1936.)—Hair tonics.

384,932.—"RAYO." Rayo Chemical Corp., doing business as Minute Products Co., Brooklyn, N. Y. (Sept. 14, 1934.)—Salve for the relief of sunburn, antiseptic mouth wash and deodorant, bath and foot powder, skin and scalp ointment, tooth powder and petrolatum.

385,031.—"DENGENE." California Dental Supply Co., doing business as Dengene Laboratories, Los Angeles, Calif. (Oct. 13, 1936.)—Mouth wash and gargle, skin cream and skin lotion.

385,097.—See Illustration. Moe D. Horowitz, Atlanta, Ga. (May, 1935.)—Shaving cream, shaving sticks, shaving powder, soap powder for bathing, washing and cleaning purposes, laundry soaps, etc.

385,118.—"Drosiou." Sophie Dadas, doing business as Mrs. Drosiou, Milwaukee, Wis. (Sept. 8, 1936.)—Cold cream, tissue cream, and face cream.

385,195.—See Illustration. The Nestle-Le Mur Co., New York. (Oct. 15, 1936.)—Preparation for use in waving hair.

385,323.—"ARISTOCRAT." Wilco Drug, Inc., Brooklyn, N. Y. (1934.)—Facial tissue.

385,376.—See Illustration. Shulton, Inc., New York. (May, 1934.)—Soaps and shaving cream.

385,458.—"SEPTICENE." H. Kirk White & Co., Oconomowoc, Wis. (Oct., 1903.)—Shaving cream and shaving soap.

385,459.—See Illustration. H. Kirk White & Co., Oconomowoc, Wis. (Sept. 15, 1936.)—Powdered hand cleaner.

385,602.—"Gay Nineties." Parfumerie St. Denis, New York. (Nov. 10, 1936.)—Toilet preparations.

385,697.—"Syncopation." Parfumerie St. Denis, New York. (Nov. 16, 1936.)—Toilet preparations.

385,714.—"SEPTICENE." H. Kirk White & Co., Oconomowoc, Wis. (Oct., 1903.)—Antiseptic mouth wash, healing ointment, tooth paste, tooth powder, bath salts, face cream.

385,722.—"Klex." Colgate-Palmolive-Peet Co., Jersey City, N. J. (July 16, 1920.)—Soap.

385,798.—See Illustration. Pacific Coast Borax Co., New York. (Aug., 1935.)—Soap and borax powder preparation for use as a cleanser.

385,973.—See Illustration. Colgate-Palmolive-Peet Co., Jersey City, N. J. (1869.)—Toilet and shaving soap.

385,974.—See Illustration. Colgate-Palmolive-Peet Co., Jersey City, N. J. (1869.)—Liquid and powder perfume, toilet water, face powder, talc powder, vanishing cream, cold cream, hand and face lotion, lipstick and brilliantine.

385,979.—"DONNA CLAIRE." Clara Furman, Brooklyn, N. Y. (Oct. 15, 1936.)—Face creams.

386,028.—"LITTLE MISS MUFFET." Chr. Hansen's Laboratory, Inc., Little Falls, N. Y. (Apr. 11, 1918.)—Food colors.

386,029.—"ENDOCREME." Hirestra Laboratories, Inc., New York. (Sept. 30, 1936.)—Skin cream.

386,042.—"Chivalry." Parfumerie St. Denis, New York. (Nov. 21, 1936.)—Toilet preparations.

386,076.—See Illustration. General Cosmetics Corp., New York. (Nov. 20, 1936.)—Styptic cream.

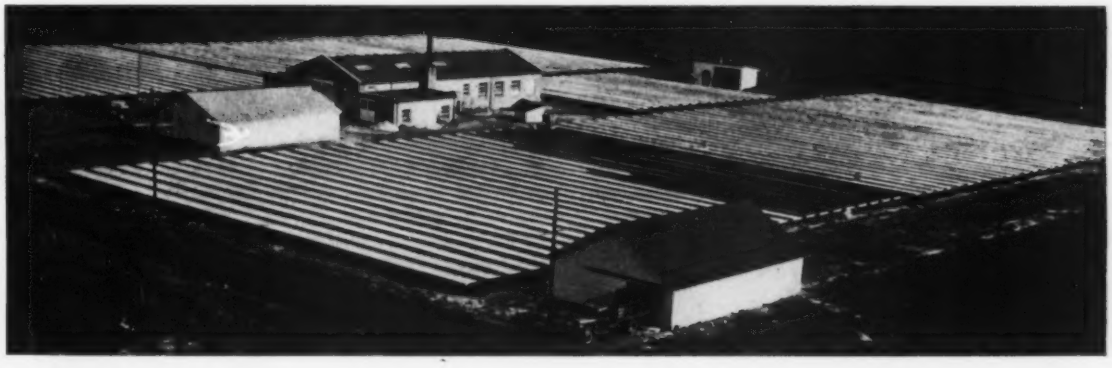
386,084.—See Illustration. Robert Richman, New York. (Nov. 12, 1936.)—Hair and scalp preparation.

386,093.—See Illustration. Hunter Anderson, doing business as Tortuga Products Co., Phoenix, Ariz. (Nov. 1, 1936.)—Cosmetics.

386,172.—See Illustration. Saks & Co.,

(*Continued on page 106*)

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(Continued from page 105)

New York. (Sept. 1, 1933.)—Shaving cream, shaving soap and toilet soap.

386,215.—See Illustration. The Lucidin Co., Inc., New York. (Nov. 12, 1936.)—Eye lotion.

386,440.—"SANI-TEX." National Retailer-Owned Grocers, Inc., Chicago, Ill. (Oct. 13, 1936.)—Hygienic soap.

386,579.—See Illustration. Colgate-Palmolive-Peet Co., Jersey City, N. J. (Aug. 26, 1935.)—Soap.

386,592.—See Illustration. Les Parfums Worth De Paris, Inc., New York. (Oct., 1935.)—Perfumes.

Trade Mark Registration Granted (Act of March 19, 1920)

These registrations are not subject to opposition.

M342,987.—See Illustration. Colgate-Palmolive-Peet Co., Jersey City, N. J. (Dec. 5, 1935. Serial No. 373,129.)—Toilet soap.

M343,214.—See Illustration. Harry Aaron, doing business as Aaron Beauty Supply Co., Brooklyn, N. Y. (Mar. 1, 1935. Serial No. 379,272.)—Brilliantine, hair bleach peroxide, white henna used in bleaching hair, hair tonic, talcum powder, eyebrow pencils, astringent lotion, hand lotions, facial creams, etc.

Patents Granted

2,068,809.—Method of permanent waving hair. Frederic Maeder, Adelaide, South Australia.

2,069,009.—Closure for collapsible tubes. William H. Jackson, Canton, Ohio, and Arthur W. Edmond, Hyattsville, Md.

2,069,157.—Dental preparation. Melville Sahyun, Palo Alto, Calif.

2,069,185.—Manufacture of vanillin from waste sulphite pulp liquor. Harold Hibbert, Montreal, Quebec, and George H. Tomlinson, Jr., Westmount, Quebec, Canada, assignors to Howard Smith Chemicals, Ltd., Montreal, Que.

2,069,556.—Sealed powder container. John J. O'Connor, New York.

2,069,643.—Beauty mitten. Wanda Burke, New York.

2,070,024.—Container closure and method of making. James W. Perry, Hartford, Conn., assignor to Colt's Patent Fire Arms Mfg. Co., Hartford, Conn.

2,070,096.—Closure. Leon G. Smith, Salt Lake City, Utah.

2,070,308.—Method of making soap particles. Henry J. Nicholls, Minneapolis, Minn., assignor to Sunlite Co., Inc., a corporation of Minnesota.

Designs Patented

D102,945.—Compact case. Mack M. Forman, Providence, R. I., assignor to Marathon Co., a corporation of Massachusetts.

D103,011, 103,012.—Toilet Bottle. Barbara Hurst, New York.

D103,048, 103,049, 103,050, 103,051.—Bottles. Frank Earl Higgins, New York, assignor to California Perfume Co., Inc., New York.

D103,056.—Bottle. Leo Mann, Providence, R. I.

D103,080.—Combined bottle and stopper therefor. Frank McIntosh, New York, assignor to Lentheric, Inc., New York.

D103,082.—Bottle. John Akinori Oya and Roy Albert Larson, Honolulu, Territory of Hawaii, assignors to Hollister Drug Co., Ltd., Honolulu.

D103,112.—Toiletry case. Florence N. Lewis, New York.

D103,121, 103,122.—Bottle or similar container. Yasuhisa Mogi, New York, assignor to Maison Joubert, Inc., New York.

D103,137.—Case or similar article. Walfrid Wallenthin, Attleboro, Mass.

D103,156, 103,157, 103,158.—Bottles. William R. Kohl, Cumberland, Md., assignor to Carr-Lowrey Glass Co., Baltimore, Md.

D103,160.—Bottle or similar container. Yasuhisa Mogi, New York, assignor to Maison Joubert, Inc., New York.

D103,163.—Closure cap. Willis M. Rose, Montclair, N. J., assignor to The Sun Tube Corp., Hillside, N. J.

D103,171.—Atomizer. Frederic A. Vuillemenot, Toledo, Ohio.

D103,190.—Cake of soap. Sinclair G. Stanley, Chicago, Ill.

D103,209.—Bottle or similar container. Oscar E. Beiser, Stamford, Conn., assignor to Edward T. Beiser Co., Inc., Stamford, Conn.

D103,239.—Vanity case. Florence N. Lewis, New York, assignor to Elizabeth Arden Sales Corp., New York.

D103,269.—Combined cap and pedestal for a collapsible tube. Philip Reinsberg, Chicago, Ill.

D103,287.—Bottle. Edwin T. Reynolds, West New York, N. J., assignor to Lorr Labs., West New York, N. J.

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(*Continued from page 56*)
ing both the choice and the quantity open.

The formulation of the acid paste is not so difficult as the variables are fewer and neither of the usual ingredients varies in its physical state or action so much. The usual abrasives, such as titanium dioxide, tricalcium phosphate, di-calcium phosphate and calcium sulfate do not vary so widely in excipient absorption and the absorption capacity is also lower. The binder is variable of course if it be either karaya or tragacanth gum or pectin. Pectin is available in different jelly strengths, being designated by number (the number is the pounds of sugar one pound of pectin will jell).

Even tooth powder can give difficulty by tending to lump. This may be caused if a high flavor figure is used with non-absorptive ingredients or if a very light chalk is employed.

Bath Salts

Whether the color used in tinting the bath salts is in aqueous or alcoholic solution, the concentration must be adjusted to a nicety, yet formulas are usually written q.s. Too concentrated a solution does not provide liquid enough to coat the salt, whereas too dilute a solution makes the mixture needlessly wet. The latter requires subsequent drying with loss of more or less perfume.

If two or more salts are used they are bound to vary in ease of tinting. If untinted crystals are to be avoided, color should be added to the most difficult to tint while agitating, then add the easier and, finally, the easiest to tint to the batch. In this manner, transfer of color from the surface of the first to the second and to the third is depended upon and makes for uniformity.

The difference between ready and high solubility, or, conversely, difficult and sparing solubility has to be taken into account in using alcohol or water as the solvent for the color. Common salt is highly but difficulty s o l u b l e, so water may be used, whereas sesqui-carbonate is relatively sparingly but readily soluble so that alcohol must be employed.

In effervescent salts, in the addition to the above is the matter of preventing premature reaction. It is not enough to intimately mix the acid and alkaline salt with starch. Starch is available with approximately 5, 7½ and 12 per cent moisture content. Preferably the first and certainly not the last should be employed. The acid crystals should be mechanically coated with starch to keep it out of contact with the alkaline salt, or salts, subsequently mixed in.

Bath tablets are even more difficult to prepare. Certainly their manufacture is more of an art than a science and the know how is indispensable.

Powders

Practically every ingredient entering into powders varies in physical properties which are difficult to describe or classify. Formulas ordinarily then simply state the percentage of zinc oxide or titanium dioxide, zinc stearate, talc, precipitated chalk, koalin, soluble and pigment colors, etc. Zinc stearate is the only one that has any semblance of uniformity physically, while in odor and titre of the fatty acid from which it is prepared it varies appreciably. Zinc oxide varies in apparent density

(*Continued on page 111*)

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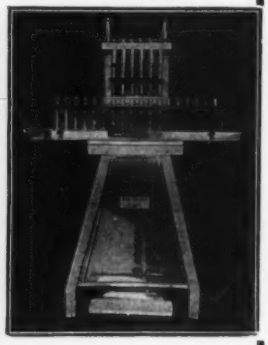
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(*Continued from page 109*)
and particle size as evidenced by the fact that a standard barrel holds from 150 pounds of the lightest to 300 pounds of the heaviest. Likewise precipitated chalk varies in density and absorption as discussed under tooth paste. Kaolin varies from the so-called "osmo-kaolin" to grades that are very inferior to color, particle size and absorption. Talc varies in chemical composition, color, particle size and quality to such an extent that this writer wrote a veritable monograph on it for these columns (July, 1933).

These various differences not only affect the desirable properties of powders, such as covering powder, adhesiveness, slip and absorption but the shade as well. A specified quantity of color may produce a frightfully off-shade on this account. Then, too, the pigment, such as ochre and burnt sienna, are not definite chemicals and are themselves very variable. The lakes each vary from lot to lot, even from the same source. An additional variable is introduced by the thoroughness (or lack of it) with which the pigments and lakes are rubbed into the powder base. Then too the soluble colors vary appreciably in their tinctorial value.

No matter then how careful the author is in writing the formula, the reader must expect to do considerable work and consume considerable time and spoil many a batch before he has made the necessary adjustments. On top of it all, even if the color were good, the experimenter might consider it very poor. One has but to line up any number of brands of face powder, all with the same shade label, to observe there is no agreement among them as to what constitutes a good rachel, peach or naturelle, as the case may be. In fact, there is not even any agreement on tints for men's after-shave talc.

For the sake of brevity, only the widely used products have been touched upon. Relatively simple to prepare lotions and wave sets sometimes present difficulty in their preservation. As mentioned under tooth paste, the gums vary widely in jelly strength. The method of their introduction is important if they are powdered and if lumping and difficult to disperse curds are to be prevented. Generally, suspending the gum in the alcohol or glycerin of the formula, then running it into the water with agitation is best.

If quince seed is an ingredient, two variables are introduced. The amount of mucilage present in quince seed is far from a constant. The method employed for its extraction affects the quantity recovered and made available.

Even the formulas for simple liquids are on occasion incorrectly interpreted, or the ingredients are different from those anticipated by the author. One sulphonated oil, for example, on dilution with water may give a crystal clear solution while another will cloud. A given perfume may cloud the straight mineral oil of a brilliantine. The mineral oils available for its preparation vary in viscosity as discussed under creams.

Liquid shampoos to remain clear and stable must be carefully prepared. They must be made from suitable grades of oils, be completely saponified and then filtered under proper conditions only after weeks of settling.

In mouth wash, the alcoholic concentration may be too low for the

(*Continued on page 113*)

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(*Continued from page 111*)
contemplated essential oils. This may result in an appreciable quantity of one or another of the oils being filtered out, resulting in an altogether changed flavor. Also this is an utter waste of oil when put on a production basis. Again, after aging, oily droplets may form or else cloudiness may develop.

Finally, there is still another cause of failure. The author may have taken a commercial size batch of hundreds of gallons or pounds, calculated it back to a percentage basis or a small experimental batch. Some products simply don't lend themselves to making up in a small experimental way. For example, it is next to impossible to rub out pigments in face powder in a mortar and develop them as they are developed in a ball or pot mill in a manufacturing way. High water content creams on a manufacturing scale may lose a negligible quantity, whereas in an experimental batch the water loss may be sufficient to affect the product with no convenient way to replace it—that is "q. s." it.

After all adjustments in ingredients, procedure and formulation are made and the color, if any, and odor finally please the experimenter, there remains the matter of stability or shelf life. There is usually no substitute for age testing. However, the age test on some products can be accelerated.

Samples of the products may be incubated in a warming chamber for a period of days or weeks. This will help determine any susceptibility to fermentation, molding, rancidity or separation that might take place. Other samples in the type of container to be used may be placed in the refrigerator, also in the refrigerating compartment and in the warming chamber, maintained at 110-120° Fahrenheit.

Still other products may be stood in direct sunlight, or, better still, under an ultra violet lamp to approximate the average display window conditions.

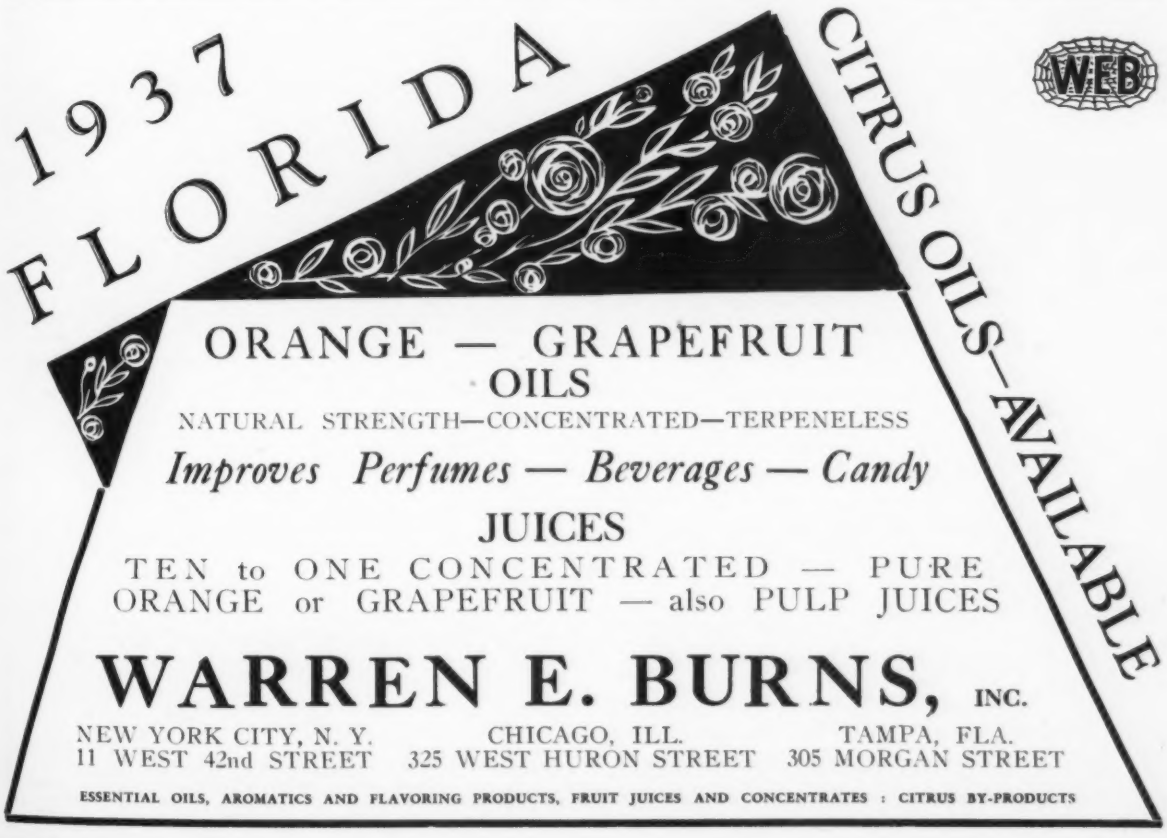
By this time one might conclude—what's the use. But this has not been a discussion of the many published formulas that do work right off but of many of the reasons why some won't or don't. To the novice, published formulas are a real boon while to the skilled and experienced they may suggest new methods of approach to a problem or different ingredients that would otherwise have been overlooked or never have occurred to him to try. To those gracious and open minded enough to publish some of the results of their labors, may this suggest being a little more thorough and explicit. To those who would profit by such sharing of experience, may they be a little more willing to experiment to adjust any usable published formula to their needs rather than be impatient with any author and his formulas that they are unable to "lift bodily."

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Vanish Co. Inc., Jamaica, New York, toilet preparations and cosmetics, $2,000. Filed by Henry C. Frey, 90-03 161st St., Jamaica, N. Y.

Linden Products Co. Inc., New York, flavoring extracts, 100 shares no par value. Filed by Delson & Weintraub, 217 Broadway, New York.



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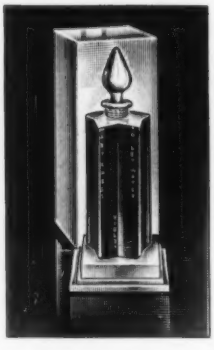
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(*Continued from page 48*)

keting of the products of the industry;

(d) or with the effect of thereby bringing about the granting of an illegally discriminatory service, payment or price contrary to Section 2 of the Clayton Act as amended by the Act of Congress approved June 19, 1936, known as the Robinson-Patman Act.

Rule 12:

It is an unfair trade practice for any member of the industry, directly or indirectly, to employ, or to pay the salary in whole or in part of, any demonstrator or salesperson to demonstrate his product or products in a retail store operated, owned or controlled by another party in which competitive products of other producers are offered for sale and sold to consumers,

(a) with the capacity and tendency or effect of thereby causing the purchasing or consuming public, when making purchases of such products, to be misled or deceived into the erroneous belief that such demonstrator or salesperson is free from any such special interest or influence, or is not so subsidized, paid or employed by such member;

(b) or with the capacity and tendency or effect of thereby hampering and unduly restricting the legitimate, free and full use and enjoyment of such retail trade outlets for the distribution to the public of competing products;

(c) or with the purpose or effect, directly or indirectly of otherwise substantially lessening competition or unreasonably restraining trade in the marketing of the products of the industry;

(d) or with the effect of thereby bringing about the granting of an illegally discriminatory service, payment or price contrary to Section 2 of the Clayton Act as amended by the Act of Congress approved June 19, 1936, known as the Robinson-Patman Act.

GROUP II

Rule A:

The industry approves the practice of each individual member of the industry independently publishing and circulating to the purchasing trade his own price lists fully setting forth his terms of sale.

Rule B:

To avoid confusion within the industry, it is recommended that each member thereof voluntarily file with some person designated by the industry all trade-marks, trade names, labels or brands used by such member and that such information be made equally available to all members of the industry and to the public.

Siam Cosmetic Market

A fair market for most lines of perfumery is to be found in Siam, provided they are offered at prices commensurate with a relatively low purchasing power. No separate figures are available for the imports of perfume oils which presumably would be included under the class "perfumery and cosmetics," imports of which for the last three years (latest available) were: 1933, $50,000; 1934, $92,000 and 1935, $118,000. There is, however, a considerable amount of foreign competition to be faced in perfume oils consisting chiefly of French, German and Swiss products. (*Vice Consul H. Gordon Minnigerode, Bangkok.*)

New Trade Agreement

The New Trade Agreement between the United States and Costa Rica provides for a 25 per cent reduction in the Costa Rican duty on liquid medicinal and pharmaceutical preparations and a 33 1/3 per cent reduction on like products when packed dry. These together accounted for $121,000 of trade in 1929 and $41,000 in 1935. There was also a cut of 50 per cent in the rate on unperfumed toilet soap and shaving soaps and a cut of one-third in that on liquid dentifrices, while other dentifrices received a reduction in duty of 41 per cent. These products together accounted for $23,000 of trade in 1929 and $12,500 in 1935.

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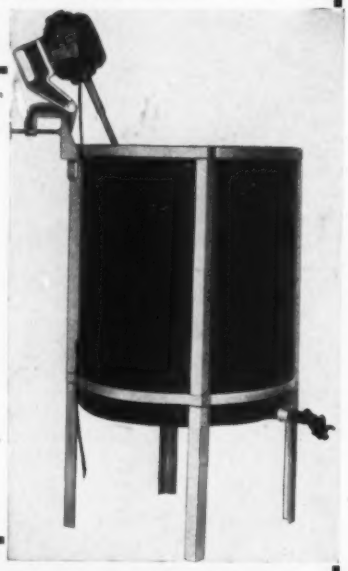
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COLOR MEASUREMENT OF OPAQUE SURFACES

By H. S. Redgrove

Under the above title, E. R. Bolton, F.I.C., M.I.Chem.E., and K. A. Williams, B.Sc., F.I.C., read a paper at the meeting of the Society of Public Analysts (London) on November 4th last, which has since been published in the Society's *Journal* (vol. 62, pp. 3 *et seq.*) describing the successful results of their efforts to apply the Bolton and Williams photo-electric method to the color measurement of opaque surfaces.

The apparatus, which was demonstrated at the meeting and is now, it is understood, on the market comprises a source of light to illuminate the test color, filters for transforming the light to pure colored lights of various narrow-wave bands distributed throughout the visible spectrum, provision for controlling the intensity of the light, a photo-electric measuring system, comprising a photo-electric cell and galvanometer arranged so that the readings of the galvanometer are proportional to the illumination of the photo-electric cell, and an easily reproductible standard white. The last is prepared by smoking an approximately white surface with burning magnesium. The amount of light scattered normally from a test surface in various parts of the spectrum is expressed as a percentage of the amount of light similarly scattered from the standard white surface under the same conditions. The results of measurements at different wave-lengths are plotted in a graph against the wave-lengths. Hence, every color measured is represented by a graph, and not by a series of numbers as in the Lovibond Tintometer. The inventors have devised a simple cell to slip into the test surface whereby the surface colors of pastes and powders can be measured; and the apparatus would appear to be well suited to measuring and hence standardizing the colors of face-powders, rouges and creams. One advantage it possesses over the Tintometer method is the elimination of the human factor.

New Companies

Peggy Grey Products, Inc., Astoria, L. I., cosmetics, 10 shares no par value. Filed by Altschul & Altschul, 1 Cedar St., New York.

Garland Laboratories, Inc., New York, cosmetics, $20,000. Filed by B. Robbins, 25 Warren St., New York.

Personal Perfumers, Inc., 15 E. Washington St., Indianapolis, Ind., cosmetics and perfumes, 1,000 shares no par value. Incorporators: Elton Geshwiler, William C. Templin and Horton H. Oliver. Filed by Horton H. Oliver, 72 S. Fourth Ave., Beach Grove, Ind.

Myrna Dee Servent Inc., 17 N. State St., Chicago, Ill., toiletries, 200 shares par value common. Incorporators: R. E. Larson, L. A. Fry, C. W. Mulfinger. Filed by Deming, Jarrett & Mulfinger, 33 N. La Salle St., Chicago, Ill.

Lola Cosmetics, Inc., New York, cosmetics, 100 shares no par value. Filed by Virginius Victor Zipris, 342 Madison Ave., New York.

Skol Co. Inc., New York, cosmetics, $360,000. Filed by Lewis & Kelsey, 120 Broadway, New York.



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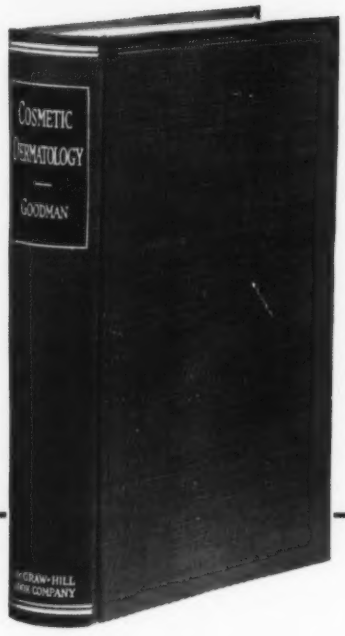
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REVIEWS OF TECHNICAL BOOKS

☐ MORE FOR YOUR MONEY, *by H. Bennett. 251 Pages. Chemical Publishing Co. of New York, Inc. 1937. Price $2.75.*

Mr. Bennett wrote this book to warn the purchasing public that it might be "stuck" in the buying of anything from an automobile to a pin. In it he has attempted to point out the features of many types of merchandise which buyers should examine with the greatest possible care before making their purchases. On the whole, he has not done a bad job.

In developing his theme, the author presents a series of "tests" to be applied to the various products under consideration and many of these tests are useful and may be applied without too much difficulty. At the same time, it is questionable whether the use of many of them will save money or are worth the time and energy necessary to their application.

The book does not "name names" as some of the other "debunking" volumes of the recent past have attempted to do. It does, however raise doubts in the minds of the purchaser regarding any and all products, which may not be desirable either from the standpoint of the buyer or from that of the seller.

Specifically regarding the cosmetic and toilet preparations section to which eleven pages are devoted, the author seems to be greatly enamoured of the "patch test." He prescribes it for almost every product in the range, whether it is satisfactorily applicable or not. With his main thesis that claims for many products are exaggerated, this reviewer is in hearty agreement. He disagrees, however, with the implication that any and all cosmetics may be harmful and should be tested on the user in advance. That implication is not borne out by the fact of millions of applications per day with almost no complaints of harm arising from the use of cosmetics. It is surprising to find Mr. Bennett, who for some years gained a fair livelihood as a purveyor of cosmetic materials, falling into what appears to be so gross an error.

The book is doubtless the best of the "debunking" series, which may, indeed, be faint praise, but is the best this reviewer can say for it.

S. L. M.

☐ PROGRES RECENTS DANS LA CHIMIE DES PARFUMS *by S. Sabetay, edited by Gauthier-Villars, 55 Quai des Grands Augustins, Paris IV, France. 1936. In French. 77 pages, price 15 francs.*

One of a series of monographs published by *La Revue de Chimie Industrielle.* The present volume reviews recent progress in the chemistry of perfumes and essential oils, in 1934. Parts of this work follow a pattern similar to the annual *Berichte* of Schimmel & Co., while other parts are treated in the usual fashion of a review. The section on synthetic musks is particularly well handled. The book is divided into nine different parts, with a bibliography of over 800 references, which in itself is a valuable contribution. A worthwhile addition to the library of all technicians in perfumery, and a gigantic labor well done by both author and editor.

M. G. DE N.

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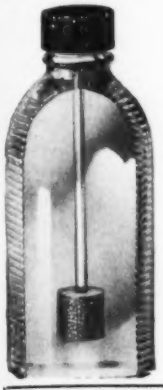
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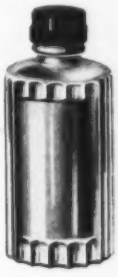
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